

**Effective countermeasures against conventional war and terrorist threats. Protection against collateral damage and contamination in conventional, chemical and nuclear attack, with nuclear deterrence against conventional warfare which, as science and history prove beyond doubt, costs more lives than nuclear deterrence. The media who profit from censoring out both effective civil defense knowledge and the effective, safe, and deterred nuclear deterrence of conventional warfare (as the W79 did in Europe in the 1980s), deliberately promulgate terror for cash, catering to politically-correct hate-based pseudo-science bigoted fashions.**

**Monday, March 01, 2010**

**How weapons and war effects lies for disarmament and peaceful co-existence just forced Britain to collaborate with evil racist thugs at Munich in 1938**

“How horrible, fantastic, incredible it is that we should be digging trenches and trying on gas-masks here because of a quarrel in a far away country between people of whom we know nothing.”

- British Prime Minister Chamberlain, radio broadcast, 27 September 1938.

**The 1935 effectively pro-Nazi “pacifist” conspiracy between Labour and Conservatives to pander to popular British pro-disarmament pacifist media sentiments**

“There is no security in armaments and we shall be no party to piling them up.”

– Labour Party Leader of the Opposition Clement Attlee, 1935 (two years after Hitler took power and began rearming Germany; quotation from Gilbert and Gott, *The Appeasers*, 1967). Troubled by the failure of unilateral disarmament to save millions of lives in WWII, Attlee 12 years later as Prime Minister ordered the stockpiling of the first British nuclear weapons to deter WWII from starting.

“Supposing I had gone to the country and said that Germany was rearming and that we must rearm ... I cannot think of anything that would have made the loss of the election from my point of view more certain.”

– Conservative Prime Minister Stanley “the bomber will always get through” Baldwin, who won the 1935 general election with a large majority by lying to get votes for popular pacifism, denying Winston Churchill’s unpopular “warmongering” claims that Hitler was rearming Germany and must be deterred effectively (speech in House of Commons, 12 November 1936). (Some pro-Baldwin historians – not Winston Churchill – claim Baldwin was referring to an earlier non-existing election than 1935, but this makes no difference to the lying.)

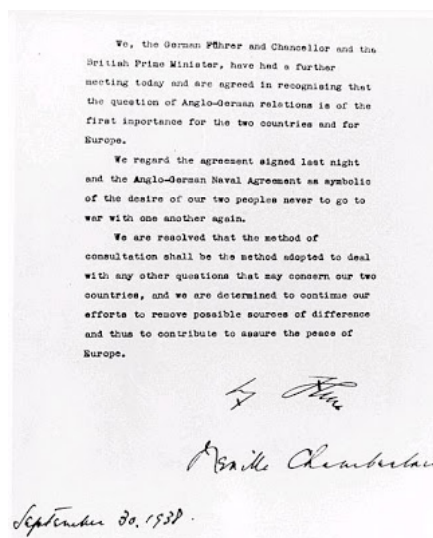
“The circle is a vicious one: the more the public is duped, the more its deceivers can claim to express the public’s will.”

- Arianna Huffington, *How to overthrow the government*, Regan Books, 2000, p. 22.

“He who molds public sentiment goes deeper than he who enacts statutes or pronounces decisions.”

- Abraham Lincoln, 1858.





ANNUAL NATIONAL DEFENCE EXPENDITURES (millions of dollars)							
Country	1933	1934	1935	1936	1937	1938	1939
Britain	455	480	595	846	1263	1693	1817
Germany	253	299	381	2600	3600	4000	4400

Source: J. F. Kennedy, *Why England Slept*, Sidgwick & Jackson, London, 1962, p. 184.

"If we handle Hitler right, my belief is that he will become gradually more pacific. ... I would feel confident if it were not for ... alarmists by profession and Jews."

- Sir Neville Henderson, British Ambassador to Berlin, telegram to the British Foreign Secretary, February 1939 (H.M.S.O., *Documents on British Foreign Policy, 1919-1939*, London, 1949, Third Series, IV, p. 593).

"Hitler has gone straight off the deep end again [violating the 1938 peace agreement]. It has all come very unexpectedly ... What distresses me more than anything else is the handle which it will give to the critics ..."

- Sir Neville Henderson, British Ambassador to Berlin, telegram to the British Foreign Secretary, 15 March 1939 (H.M.S.O., *Documents on British Foreign Policy, 1919-1939*, London, 1949, Third Series, IV, p. 595).

"Kapitulieren werden wir nie." (We will never capitulate.)

- Adolf Hitler, speech at the Bürgerbräukeller, Munich, 8 November 1939.

"At no time did Hitler threaten to initiate war against France and England. He simply threatened to 'retaliate' if they attacked him. The Munich crisis had an incredible sequel in March 1939. ... Hitler occupied the rest of Czechoslovakia. The technique he used is such an obvious prototype for a future aggressor armed with H-bombs that it is of extreme value to all who are concerned with the problem of maintaining a peaceful and secure world ..."

- Herman Kahn, *On Thermonuclear War*, Princeton University Press, 1960, p. 403.

Fanaticism is marked by lying, obfuscation, and suppressing facts (such as the *higher* rate of German arms spending than British "rearmament" after 1935, despite endless lies to the contrary from recent revisionist historians who claim Baldwin and Chamberlain were buying time rather than simply losing time; *if you run slower than your competitor then the longer the race goes on, the bigger the gap*) in the belief that "the ends justify the means". Politically "correct" idealism dressed in the camouflage of ethical pacifist morality backed up by brainwashing lying propaganda and suppression of factual evidence to the contrary actually proved historically to cause the greatest disasters ever to befall humanity: the road to hell is paved with good intentions. It is this lying "politically correct" fanaticism that is used to defend exaggerations and lies for political ends. The plight of the Jews was arrogantly and abusively swept aside in the false war effects exaggerations of the pacifist movement. Exaggeration and lying about weapons effects in the mere hope it will be justified by ending war proved to be the worst kind of fanaticism, by encouraging aggressors and war, i.e. precisely what it claimed to prevent. Weapons effects exaggerations both motivated aggression in 1914, and prevented early action against Nazi aggression in the mid-1930s, as this blog post will document.

Herman Kahn explained how lying weapons effects exaggerations nurtured World War II in a culture of fear in place of a relatively limited war to disarm the Nazis, in the following testimony to the [1959 hearings on the Biological and Environmental Effects of Nuclear War, page 883](#):

"... before World War II, for example, many of the staffs engaged in estimating the effects of bombing over-estimated by large amounts. This was one of the main reasons that at the Munich Conference and earlier occasions the British and the French chose appeasement to standing firm or fighting. Incidentally, these staff calculations were more lurid than the worst imaginations of fiction."

Herman Kahn goes on to explain how such exaggerations of weapons effects in popular media disarmament propaganda encouraged the secret proliferation of Nazi weapons, in his book *On Thermonuclear War*, Princeton University Press, 1960, pp. 390-1:

"... in spite of the tremendous scale of the violations it still took the Germans five years, from January 1933 when Hitler came in to around January 1938, before they had an army capable of standing up against the French and the British. At any time during that five-year period if the British and the French had had the will, they probably could have stopped the German rearmament program.... it is an important defect of 'arms control' agreements that the punishment or correction of even outright violation is not done automatically ... but takes an act of will ... one of the most important aspects of the interwar period [was] the enormous and almost uncontrollable impulse toward disarmament ... As late as 1934, after Hitler had been in power for almost a year and a half, [British Prime Minister] Ramsey MacDonald still continued to urge the French that they should disarm themselves by reducing their army by 50 per cent, and their air force by 75 per cent.

"In effect, MacDonald and his supporters urged one of the least aggressive nations in Europe to disarm itself to a level equal with their potential attackers, the Germans. ... *Probably as much as any other single group I think that these men of good will can be charged with causing World War II.* [Emphasis by Herman Kahn.] ... Hitler came into power in January 1933 and almost immediately Germany began to rearm ... but it was not until October 14, 1933 [that] Germany withdrew from a disarmament conference and the League of Nations ... Hitler's advisors seem to have been greatly worried that this action might trigger off a violent counteraction - for example, a French occupation of the Ruhr. But the British and the French contented themselves with denouncing the action."

The evil thing is that both during the 1930s when the Nazi menace was gathering strength, and during the Cold War when the communist menace was doing the same, weapons effects exaggerations were enforced and rewarded by the military, the politicians, the media and the public. The military involvement in fiddling the figures has always been particularly sadistic, because they hold in their hand the "top secret" classification stamp, and act both as data sources and data censors: critics either don't have access to the facts, or if they do, they are bound by strict secrecy laws. All power corrupts, said Lord Acton, and the military have always been severely tempted to present political leaders with a selection of data and calculations that back-up their projects. The mechanism is not outright corruption but often the exact opposite (a creeping corruption caused by a general incredulity or hostility to new plans, where *ideas must be dressed-up with exaggerations, just in order to get attention and approval from high authority*):

"The German analysis predicted that the submarine campaign would force England to make peace within five months, thus promising a short road to victory. This prediction was crucial for the final decision to go ahead ..."

- Fred C. Ikle, *Every War Must End*, Columbia University press, N.Y., revised ed., 1991, p. 43.

The posthumous prizes of the war-monger Alfred Nobel and the "Soviet World Peace" council's prize for lying propaganda, the "Lenin Peace Prize", rewarded lying exaggerations designed to disarm those who love freedom and peace, and make them appease the world's most evil lying terrorists. **While Winston Churchill is today a widely tolerated historical figure, in the 1930s, when his warnings of racist lying evil could have been used tackle the Nazis from the start and prevent the holocaust, he was attacked by liars like Cyril M. Joad, who led the 1933 Oxford Union pacifist motion which sent out a very clear signal to the new German Chancellor, Hitler, and even in August 1939 published the mass-market appeasement-supporting Penguin book, *Why War?* Like fellow liars Sir Austin Chamberlain and Sir Norman Angell, Joad only profited with fame, cheers and applause from his lying war-mongering propaganda which falsified the risks from an early intervention to stop evil.**

Nobody dared to condemn weapons-effects-lying pacifist propaganda then, and nobody dares to condemn it today. We still reward the lying exaggeration of the effects of nuclear weapons in our **fashionable groupthink delusion** that, by making civil defense and weapons effects "unthinkable", or by disarming, we make ourselves safe and secure from terrorism, war and genocide.

**"... We learned about an enemy who is sophisticated, patient, disciplined, and lethal. ... We learned that the institutions charged with protecting ... did not adjust their policies, plans and practices to deter or defeat it." - Thomas H. Kean (Chair) and Lee H. Hamilton (Vice Chair), Preface to The 9/11 Commission Report, by the U.S. National Commission on Terrorist Attacks Upon the United States, 2004.**

What about the bigger risk than conflict? Who speaks up about the *far bigger* risk that, if only we had disarmed and surrendered the Nazis would have been able to continue their thousand years of third reich evil, totally unopposed? Why do supposedly rational animals collectively believe in what they know deep down are complete lies? Why *ad hominem* attacks on those who report the facts? The answer is simple: **fashionable groupthink** is really *fascism under disguise*. When we believe in popular lies, we're doing what the supporters of Nazism and communism did, namely believing in the enforcement of a consensus of lies in the belief that "the ends justify the means". *The fact that weapons effects lying has been counterproductive in the past (causing appeasement until World War became necessary) has been swept under the carpet in a fashionable groupthink of self-deception:*

"Fascism is not a doctrinal creed; it is a way of behaving towards your fellow man. What, then, are the tell-tale hallmarks of this horrible attitude? Paranoid control-freakery; an obsessional hatred of any criticism or contradiction; the lust to character-assassinate anyone even suspected of it; a compulsion to control or at least manipulate the media ... the majority of the rank and file prefer to face the wall while the jack-booted gentlemen ride by."

- Frederick Forsyth, *Daily Express*, 7 October 2005, p. 11.

There is nothing wrong with fashion or consensus, as long as you are honest about what you are doing. What's wrong is lying that fashionable groupthink is the same thing as the right thing to do because "so many people can't all be wrong", when deep down you *know* it is wrong. **This usually ignored problem is actually rampant due to human nature, even in the supposedly most rational areas, like "not even wrong" superstring theory, the myth that human beings should**

**not change the climate because such change is "unnatural" and human beings cannot adapt to climate change (despite having adapted and indeed flourished under much more rapid rates of climate change during the past ten thousand years), and other pseudoscientific claims** which are lies made to gain funding grants. Sure, it is worth funding research in some of these areas, that's not at issue; what *is* at issue is *whether lying propaganda hype should be funded by taxpayers or not*. In 1980, the supreme statement of arrogant, ignorant and apathic stupidity was made by the United Nations report *Nuclear Weapons*, claiming that theoretical lies about nuclear weapons effects are to be revered and worshipped like sacrosanct truths!

**How weapons effects lying for "peace propaganda" is just the arrogant media dictatorship of ignorant authority figures, falsely claimed to be science experts**

**An earlier blog post discussed the 1930s lying attacks by Cambridge "peace" scientists on British civil defence efforts to get the country ready to deter the Nazis.** Sir Normal Angell, whose pre-WWI best-seller *The Great Illusion* claimed war to be just a great illusion that nobody could profit from (so we can safely disarm) was disproved in both World Wars, but still emerged a hero figure to the pacifist movement with a knighthood and a Nobel Peace Prize, and Sir Austin Chamberlain (half-brother of Prime Minister Chamberlain, who went to Germany to collect Hitler's autograph on a lying peace declaration). More recent examples from the Cold War era will also be discussed. The key reason why these people were not blamed was their "good intentions". The path to hell is paved with good intentions. Disarmament and a refusal to credibly deter aggressors is always a peaceful, civilized "good intention". But it has repeatedly backfired, encouraging the very disasters it claims to aim to solve. Sloppy calculations are to blame.

Howard Morland, a disgruntled U. S. Air Force pilot discharged for questioning Vietnam tactics, interviewed some of the modern physics professors who were involved in the public hyping of nuclear weapons effects exaggerating "peace propaganda" during the Cold War, exposing alleged incompetence of the basic physics involved, and more importantly *arrogant assertion of false guesswork claims, just as occurs in the hype for 1st quantization and string theory*, in his book *The Secret that Exploded* (Random House, New York, 1981):

"[Pages 61-2.] The first interview ... with **Bernard Feld**, the editor in chief of the *Bulletin of the Atomic Scientists*, ... Feld told me ... he thought that the cruise missile warhead was a pure fission weapon (it has a yield of 200 kilotons) and that it used about 10 kg of plutonium. This statement was entirely incorrect, I later realized; the **magisterial quality** of Feld's delivery suggested a virtual pride in his ignorance of the subject. He also told me that fifty to a hundred nuclear weapons, not ten thousand, were all we needed for deterrence. ... The next day - Friday, July 7 [1978] - I had my first interview with **Philip Morrison**, also at MIT. Morrison, a professor emeritus of theoretical physics whose elegantly written book reviews provide some of the most reliably enjoyable reading in *Scientific American* ... talked about Herbert York's book *The Advisors* and the idea of fission weapons boosted by fusion reactions. He said he thought that it was a tritium-tritium, not a tritium-deuterium fusion reaction, which did the boosting. It turns out this too was **wrong**. ...

"[Page 138.] My next target was **Sidney Drell** ... Drell offered no resistance to the opportunity to examine my drawings. I explained each one to him. 'Is that correct?' I queried, after proffering a description which I then thought was correct, though I now know it to be wrong. 'Yes,' he replied ... I endeavored to extract from him some information about radiation pressure: 'Would gamma or X-rays be more suitable for compressing the fusion fuel?' 'That is a designer's option,' Drell **said**.

"[Page 145 mentions basic calculational errors by **Postol**, who gave Lynn Eden **"firestorm" exaggerations, based in part upon falsely correlating blast effects on obsolete charcoal braziers in overcrowded 1945 Hiroshima wood frame housing, with thermal radiation, exposing a complete ignorance of the Hiroshima firestorm findings in the long-declassified 6-volume U. S. Strategic Bombing Survey interviews with survivors.**] **Ted Postol**, the scientist from the Argonne National Laboratory ... Postol calculated the radiation pressure inside the casing of the Teller diagram to be  $10^{12}$  atmospheres ... His calculations, which sounded very erudite, **turned out to be flawed** ..."

In the section on his interview with **Herbert York**, Morland writes critically about the **groupthink** necessary in the peace propaganda movement (it is this **groupthink** consensus that allowed Hitler to get away with evil in the 1930s):

"... in the interest of unity, all decisions had to be supported by all members before they could be taken. Every decision had to be unanimous. York said that he had noticed at the University of California at San Diego, where he worked, that charismatic student leaders used the consensus method to control groups. The purpose of **Robert's Rules of Order** was to prevent the domination of a group by one individual [like Winston Churchill standing almost alone against Hitler in the 1930s] or by a small circle; that is why charismatic leaders [Hitler, Lenin, Stalin, Chamberlain] prefer consensus to parliamentary procedure. It suppresses dissent and makes the group more easily dominated by making all dissent appear obstructionist."

Many of the incorrect statements Morland collected were from alleged experts who had authored "authoritative sounding" articles in journals like the *Scientific American* or *Bulletin of the Atomic Scientists*, based on false understanding about nuclear weapons effects. It's not rocket science that they failed at, but basic physics. **It is commonplace for widely hailed "intellectual mathematicians" to go into physics and fail to understand anything properly, while being cheered and applauded by the mainstream who always think of science as being just a political activity based on authority, rather than based on facts and results.**

"... wisdom itself cannot flourish, and even the truth not be established, without the give and take of debate and criticism. The facts, the relevant facts ... are fundamental to an understanding of the issue of policy."

- J. Robert Oppenheimer, 1950 (quoted by Howard Morland, *The Secret that Exploded*, Random House, New York, 1981; unnumbered preliminary page).

As mentioned in a previous post, my father was a civil defence instructor in Britain who could see where things were going for recruitment with civil defense having its hands tied behind its back by official secrecy, while being pounded even in the mid-1950s by anti-civil defense propaganda concerning nuclear weapons effects and countermeasures.

He left in 1957 when Britain's Civil Defence Corps was at its largest size since the wartime Blitz (a peak membership of 336,265 by May 1956, reported in *The Times*, 2 May 1956, page 6). He left Britain for West Africa, first Ghana, then Nigeria where between 1961-1969 as the accountant to the Holman Brothers road building equipment manufacturer and servicer with depots throughout the country, he observed the mechanism behind outbreak of the **Nigerian Civil War which started on 6 July 1967**. Nigeria had gained its independence in 1960, but tribal tensions only escalated when oil was discovered in the delta at Biafra and it was obvious that the proceeds would be diverted from the local population to the Federal Government (dominated by another tribe), so Biafra tried to declare itself an independent state to keep some of its own oil revenues for its people. The British Government (Labour's Harold Wilson) continued shipping arms to the Federal Nigerian Government for them to fight against relatively unarmed Biafrans (although they eventually received some support from the French, who were after their oil, like Harold Wilson), amid mounting charges of genocide from news media led by **BBC journalist Frederick Forsyth who "left the BBC in 1968 after controversy arose over his alleged bias towards the Biafran cause and accusations that he falsified segments of his reports. Returning to Biafra as a freelance reporter, Forsyth wrote his first book, *The Biafra Story* in 1969."**

In 1995, a BBC Timewatch documentary on the war was broadcast under the title "Fighting a War without Guns" (the Federal side has guns, the insurgents didn't, but they still put up a terrific fight), a title which in a way sums up the whole problem with weapons effects exaggerations for war. Humans come supplied with two arms and the mental capacity to improvise effective weapons, and don't necessarily need very advanced weapons like bombs or guns to start a war. Numerically, what's the formula for the killing capacity of a stick, a stone, or a machete? There isn't one, because unlike once-only bullets and bombs, primitive weapons are reusable, just as gas chambers and torture tools are reusable. **In fact, the Biafrans with more primitive weapons plus photographs of dying, starving, children (issued by Markpress, the Biafran Government's public relations firm) splashed across the world's newspaper front pages, were able to continue a war of slaughter against a well-equipped modern army.** "Ethnic cleansing" simply did not begin and end with Auschwitz. War isn't the worst conceivable nightmare: if it were, there simply would be no war. Even if both sides have no guns, they will still have sticks, stones, etc.

Pacifist non-interventionism groupthink by the United Nations in 1994 led to genocide of 937,000 Tutsis and moderate Hutus by the Interahamwe in Rwanda in 1994 when they voted to withdraw most of the UN peacekeepers (protests from the local UN commander Romeo Dallaire were simply ignored in favour of the consensus from New York). Additionally, the UN voting on new member states for its *human rights commission* elected Gaddafi-era terrorist Libya (behind the Lockerbie bombing) and the Sudan whose state-sponsored Janjaweed "ethnic cleansing" massacred thousands of innocent people in Darfur. Political doctrines of the "pacifist" no-war type cause a tribal aggressiveness via fanatical ideological propaganda, leading to increasing risk-taking, increasing censorship of real facts, and irrational exaggerations of non-existent or trivial dangers simply in order to deflect attention from the real risks of genocide. These people are awarded peace prizes for trying to make the world ideologically better, even if the attempt leads to a world war. The mass-media mostly refuses to effectively debunk idealistic, pseudo-ethical, lying propaganda, because it knows the penalty is bankruptcy: the public don't want to face reality, preferring ideals, and won't buy hard facts if there is any fictional big-brand name "ethical" propaganda lying alternative on sale. This is why lying fiction is always more popular in cults than facts. **You can't get rid of war or even make it "more humane" by disarmament. As in the 1930s, that just gives an incentive to aggressors to make feared arms in secret.**

(Before you think that nuclear bombs are today too enormous to make in secret in a dictatorship, remember that democratic countries like America and Britain made them in secret, and not just during the war! Democratic Britain clandestinely made its first nuclear bomb under a postwar Labour Government led by 1930s pacifist Clement Attlee, *without any Parliamentary debate despite it being peacetime.*)

The efficiency of simple dispersal and improvised protection against explosions was most obvious in Vietnam, where America used its giant B-52 bombers to drop 11.3 megatons of TNT equivalent in the form of small conventional explosives, i.e. two-and-a-half times the Second World War strategic bombing load on Japan, Germany and axis occupied countries (such small blasts are far more efficient than an equal total yield of nuclear bombs, due to energy wasted in overkill, with the damaged area and casualties scaling less than proportionately with bomb yield, as we will see later), which was some 331 kg of high explosive for every man, woman and child in Vietnam, at a cost of \$150,000 million, *without* winning the war:

"... more than 10 billion pounds of TNT was dropped on Germany, Japan and Italy during World War II, this equalled more than 50 pounds for every man, woman and child. ... Arithmetically considered, the result should have been the total annihilation of one and all. ... During the Vietnam War, more than 25 billion pounds of TNT were dropped ... an average of 730 pounds for each of a total population of 34 million. ... yet the USA was unable to kill enough people, or to disrupt economic life, transportation or communication sufficiently."

- Senator Foy D. Kohler, Foreword to **Leon Gouré's *War Survival in Soviet Strategy* (Centre for Advanced International Studies, Miami, Florida, 1976, p. xv).**

After the Cold War, Harvard politician scientist Samuel Huntington addressed the problem of the next battleground in an article in *Foreign Affairs* and in an interview in the 28 June 1993 issue of *Time*. In ancient times, most wars were made between kings or tribes. Both twentieth century World Wars and the Cold War were between ideologies such as imperialism versus democracy or democracy versus dictatorships of fascism or communism. Since the fall of the Soviet Union, the nature of war has continued its evolution and wars have predominantly been between rival religious "civilizations" (as termed by Huntington). E.g., the Croatian versus Serbian Civil War which started in the former Yugoslavia after the Soviet Union collapsed (sparked when Croatia declared itself independent on 29 May 1991), was a war between people who spoke the same language but followed different religions or forms of "civilization". In the 1993 *Time* interview, Huntington argued:

"The conflicts among civilizations will be increasingly central: the West and Islam, Islam and Hindu civilizations in India, Islam vs. the slavic Orthodox Russian civilization, China and Japan as civilizations. ... Islam is the most strict religion in the world outside of Christianity. There is no separation between religion and politics. ... The most significant dividing line in Europe now is the line where Western Christianity ends and Orthodox Christianity and Islam begin. That is a line which hasn't changed much in several hundred years. Its significance was suppressed during the cold war. ... In Asia there is the Hindu-Muslim conflict in India, which could involve Pakistan. ... the Asian and virtually all the Middle Eastern Islamic states are increasing their military strength. There is this Confucian-Islamic connection between China and North Korea on one hand and Middle Eastern states like Iran, Iraq, Syria and Libya on the other. ... The cold war was relatively simple. The Russians certainly had no **martyr complex**. They were rational in ways we tend to think



of as rationality. It is not clear that people in these other civilizations think in the same way."

In a famous speech, President Ronald Reagan stated that hitherto, "peacemaking" has been corrupted by political ideologies (such as weapons effects and war effects exaggerations to support pacifism towards dictatorial ideologies like fascism and Marxism, as shown by Reagan's civil defense and ABM/Starwars innovations, discussed in detail later in this post), leading to suffering and war, not peace and salvation: in future peacemaking must cease to be an ideology of lying exaggerations, and must focus on achieving religious or spiritual harmony. The inner resolve to fight and win the battle for the unalienable rights of life, liberty and the pursuit of happiness, does not come merely from having an arms stockpile. *It comes from a belief in the highest possible moral standards.* War is an extension of politics, so weapons are political instruments, but the deep cause of war or political disagreement is hatred, either ideological or unspiritual. Solve the deep spiritual or religious *cause* of conflict, and then the *symptom* of political fighting, warfare, is healed. A deep-rooted cancer may not be healed just by easing symptoms, like trying to outlaw the use of weapons in war. We must resist the temptation of sinking into an immorally lax approach towards the deeper spiritual meaning of life. President Reagan stood firmly on very high moral ground in order to *credibly* denounce the false doctrine of hatred toward life, liberty, and freedom. Reagan capitalised on American spirituality and moral superiority in order to resist communist propaganda, and to help to reform evil. *Peacemakers stand on the moral high ground of truth to reform evil terrorists.*

Today, the main thrust of military activity is rightly dedicated to **counterinsurgency**, in which terrorism is being largely prevented by military operations. But the apparent success of this policy should not lead to general war complacency, or else defense and civil defense weaknesses will grow and soon be exploited by terrorist groups or other enemies in an unexpected, carefully planned surprise attack, as occurred on **11 September 2001**. The Hague Declaration of 1899 Concerning Asphyxiating Gases banned the use of "projectiles the sole object of which is the diffusion of asphyxiating or deleterious gases." In his 1923 book *The World Crisis*, Winston Churchill summarised the wishful thinking of people towards warfare including chemical warfare in 1911:

"It is too foolish, too fantastic to be thought of in the twentieth century ... No one would do such things. Civilisation has climbed above such perils. The interdependence of nations in trade and traffic, the sense of public law, the Hague Convention, Liberal principles, the Labour party, high finance, Christian charity, common sense have rendered such nightmares impossible."

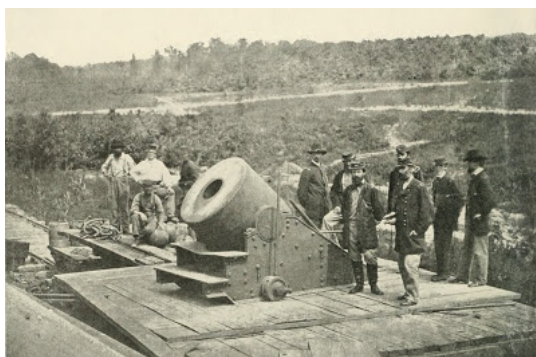
Despite the wishful thinking of the 1899 Hague Convention banning chemical warfare, chemical warfare was used by both sides in World War I, and was used in gas chambers in World War II. The mechanism for war is an extension of political disagreement, which will always be possible. **Karl von Clausewitz's posthumous 1832 *On War*** argued that war is fundamentally a political problem:

"War is not merely a political act, but also a real political instrument, a continuation of political commerce, a carrying out of the same by other means."

It was not until **Herman Kahn's *On Thermonuclear War* of 1960** that the first hint of a problem with the popular exaggeration of weapons and war capabilities became public. But the first crisis in the simplistic exaggeration of weapons effects of relevance to nuclear weapons occurred during the American Civil War of 1861-5 between the industrialized free Northern Federal Union states (150,000 men under arms within two months) and the slavery-supporting Southern Confederacy (112,000 men were armed within two months). Despite vastly superior resources and funding, the Union army led by Grant and backed by President Lincoln was nearly defeated by a smaller, war-weary Confederate army led by Lee during nine-months of trench warfare in the Siege of Petersburg. Conventionally, war was dominated by rules of engagement like those of a duel, in which little or no cover was utilized, and massed concentrations of troops or cavalry were exposed to fire:

"... the thinning out of ranks made them less vulnerable to incoming fire. ... gains were ameliorated further when men took to lying down to shoot or, better still, made a point of firing from trenches or behind cover, instead of standing up in the open as so recently in the past decade."

- **Kenneth Macksey**, *Technology in War: the Impact of Science on Weapon Development and Modern Battle* (Arms and Armour Press, London, 1986, p. 26).



Above: An expensive Dictator mortar at the Siege of Petersburg, American Civil War, 1864.

Such weapons came with the promise of striking a knockout blow, but the very high protective factor of simple countermeasures, like trenches, negated most of the blast and debris danger (unless the trench was literally within the crater rupture zone radius). Huge quantities of munitions had to be fired, creating a war of attrition

backed by constant supplies from an arms manufacturing industry. The facts about American Civil War countermeasures and thus almost certain defeat were not widely known so Germany ignored the American lessons of trench countermeasures in 1914, and therefore believed its big guns could strike a quick knockout blow. Trenches turned the planned short-duration war into a long-duration war of attrition, allowing a Naval blockade to defeat Germany. Germany faced exactly the same problem with its false expectation of using gas against trenches (gas masks were immediately improvised, as Herman Kahn explains in his 1960 *On Thermonuclear War*), and then submarines armed with torpedoes to try to achieve a Naval knockout blow or blockade of shipping against Britain. Germany submarines were simply detected with improvised ultrasonic-frequency hydrophones (waterproofed microphones, suspended underwater, were in 1918 supplemented with the **asdic** technique of sending out sonic waves to bounce back from submarines, and thus map their exact positions underwater, leading to the development of modern **sonar**), which allowed precise depth-charging to supplement the secret magnetic minefields guarding Naval bases and ports. German submarine action backfired completely when the **Lusitania was torpedoed on 7 May 1915**, causing America to enter the war. Ships subsequently sailed in convoys protected by anti-submarine warfare.

Modern machine guns and large caliber mortars *failed* to deliver their promised “knockout blow” in the American Civil War, but the lesson was ignored by Germany fifty years later in 1914, again in 1939, and continues to be ignored in virtually all media propaganda about all kinds of weapons today, despite the failure of the Nazi Blitz to defeat Britain, the failure of the first nuclear bomb dropped on Japan by itself to end World War II (the bomb on Hiroshima had to be followed by Nagasaki three days later, plus the Russian declaration of war, before Japan finally accepted a conditional surrender), and despite the failure of *many megatons* of explosives in aerial bombardment to knock out the North Vietcong, leading to American failure in the Vietnam War! The American Civil War was the first time in history that industrialized warfare was tried and it was blunted by simple improvised trench defenses to create a long-duration war of attrition, requiring the expenditure of vast quantities of ammunition and explosives in a *failed* effort to overcome very modest, low-cost defenses, as explained by **Kenneth Macksey in his brilliant analysis, *Technology in War: the Impact of Science on Weapon Development and Modern Battle* (Arms and Armour Press, London, 1986, pp. 28-29):**

#### “Trench Warfare – The Lines of Petersburg

“When Grant deluded Lee as to his true intentions after the Wilderness Campaign, managing suddenly to appear in mid-June [1864] with massed forces at Petersburg ... an army of 65,000 was insufficient to overcome the 40,000 men Lee had rushed to the spot by rail. ... the Confederates extended their entrenchment to their right, always in time to meet each assault while fiercely contesting Grant’s further attempts to cut the line to Richmond or the one running Westward from Petersburg. ... The attack on the Redoubt at Petersburg on 30th July demonstrated in utter confusion the inability ... a mine containing four tons of black powder was to be exploded beneath the Redoubt and its [Confederate] defenders. ... among the Confederates initial shock was overcome and a counter-stroke launched in the afternoon. Artillery sealed off the flanks of the 500-yard breach in the defences ...

“The [Union] Federals were flung back with the loss of 3,793 men. That day the Confederates lost 1,182, including those blown up. ... Grant strove fitfully to break the deadlock ... creating for the logistic support of his troops a comprehensive conglomeration of base depots, camps and railway spurs leading to within artillery range of the enemy. Facing the Confederate capital the entrenched front was some 37 miles long, manned by 90,000 well-provisioned Federal troops on one side, and 60,000 deprived but fanatically determined Confederates on the other. Try as he would to smash through, Grant was defeated. ...

“Had Grant’s exploits comprised the sole Federal effort in 1864, they could well have led to his and President Lincoln’s downfall in an election year. The disgruntled General McClellan was campaigning for the Democratic candidacy with a call for an end to the war. He might have won if General William Sherman, taking advantage of the drain of Confederate strength to the East, had not struck the decisive blow in the West.”

Therefore, **the many miles of effective enemy improvised trench shelters dispersed and protected soldiers from mortar fire and machine guns, thereby negating ignorant exaggerations of expensive weapons effects for a knockout blow, and extending to nine months the failed Siege of Petersburg by Lt. Gen. Ulysses S. Grant in 1864-5 during the American Civil War.** Ignoring this vital lesson from trench warfare and believing warmongering exaggerations of high explosive shelling and machine guns made by inventors and the arms industry, German’s leaders attempted in 1914 a “knockout blow” by offensive firepower, which failed due to trench defenses. Gas masks then negated poison gas, a desperate tactic developed to try to overcome trench defences. Trenches brought time which allowed Naval action to grind down and defeat German ambitions.

Instead of finally learning the lesson from World War I that exaggerations of weapons effects and downplaying defensive countermeasures have caused war and suffering, exaggerations of weapons effects while downplaying countermeasures was a tactic used before World War II in an effort to make all sensible people avoid war. **(The Nazis blamed German defeat in World War I not on the false military assumption of a quick knockout blow due to ignorance of the effectiveness of simple trench countermeasures, but on the 500,000 Jews in Germany, 0.76% of German's population.)** The “lying for peace” policy failed for the obvious reason that it was only effective for those peaceful states where it was completely unnecessary, but it was ineffective for the belligerent states where it was necessary. The fascists repeatedly made and broke false peace promises to buy time and lull fears, while for propaganda Hitler in 1936 put forward a lying but applauded Nazi 25-year-peace-plan to successfully detract attention and concern over his war preparations. Exaggeration of weapons effects and false attacks on civil defense as warmongering actually encouraged proliferation of precisely the most feared weapons to disarmed states which saw aerial warfare as a means to achieve aggressive intimidation of peace-loving states.

What happened was that towards the end of World War I, when Germany was being defeated by trench warfare in combination with Naval action, two new military technologies were used with limited success: tanks and aircraft. Like the first nuclear bomb dropped on Hiroshima in 1945, neither the tanks nor the aircraft of World War I accomplished any manner of knockout blow despite the element of surprise. Nevertheless, following the lying exaggerations of knockout blow potential of explosives, mortars, machine guns, big guns, gas and submarines in earlier combat, both tanks and aircraft were widely and loudly touted in postwar propaganda and media futurist speculation as capable of achieving a knockout blow, if used in surprise against a defenseless target. The order by British General Sir Douglas Haig to send the infantry out of trenches and into enemy machine gun fire as standing targets in the **Battle of the Somme** on 1 July 1916 achieved only a record number of casualties, nearly 60,000 on the first day. This disaster motivated General Haig to test the innovative idea from Lieutenant-Colonel **J. F. C. Fuller** for British armoured tanks to lead an invasion.

The idea of the tank was simply to allow a safe passage over the barbed wire lines and ditch fortifications of the enemy in a heavily armed and steel-protected tracked vehicle, thereby overcoming the stalemate of trench warfare defenses against machine guns and high explosives. Fuller’s plan was tested in the **Battle of Cambrai, 20**

**November 1917.** The 476 tanks successfully crossed the lines but moved too far ahead of the unarmoured infantry and cavalry they led, and were unable to completely overrun enemy guns. The tank attack degenerated and failed to achieve a knockout blow due to lack of any radio coordination between tanks, infantry, air support, and commanders, as **Royal Tank Regiment Major Kenneth Macksey** clearly explained in *Technology in War* (Arms and Armour Press, London, 1986, p. 94):

“Once tanks and artillery had overcome the enemy machine-guns, the vehicles pulled back to rally and replenish, and the troops had to await orders by telephone to engage targets not included in the initial programme. The infantry, having caught up with the tanks, felt unable to progress without armour, as did the cavalry. ... A few tanks carrying radio, which were used for the first time here as report centres, barely contributed. It usually took two or three hours to arrange a fresh attack. ... German troops reinforced the sector massively by means of a remarkable nose-to-tail traffic in railway trains from far afield – a movement that neither long-range guns nor bombing aircraft could prevent. Using several mobile anti-aircraft guns to check the tanks at Fontaine, the Germans stabilized the situation and rapidly built up a counter-stroke.”

Therefore, the tank in World War I lacked adequate two-way radio communications, which were finally developed during the 1920s and formed the basis of the Nazi “Blitzkrieg” (lightning war) plan for World War II, which – just like other exaggerated weapons fantasies – worked well on completely unprotected targets in surprise attacks (any weapons do that), but led to false confidence and a major defeat during the Battle of Stalingrad, during which the tanks travelled so far into enemy territory that their logistics became vulnerable, so they ran out of sufficient fuel, munitions, and air support. Only when the vulnerable supply chain logistics for the delivery of fuel and ammunition was maintained (which severely limited the scope of Blitzkrieg), were tanks successfully able to overcome strong city defenses. In the Battle of Stalingrad, between 17 July 1942 and 2 February 1943 the Nazis were bogged down in house-to-house fighting during the summer, fall and winter, and despite their desperate efforts using both tanks and bomber aircraft Blitzkrieg, they failed to overcome defenses despite causing over a million casualties.

Until 1974, when **Fred Winterbotham's *The Ultra Secret* was published**, the tank was still widely hyped as being a brilliant success in the hands of Field-Marshal Montgomery against the German tanks of Rommel, where **Monty dug his tanks in to be ready to meet the Germans in surprise for an advantage at the 1942 Battle of Alam Halfa Ridge**, for example. The problem with this false interpretation of history was that the true facts were secret, and Monty exploited the situation as he had been instructed to do, claiming on TV repeatedly that he simply figured out what Rommel's actions were likely to be and prepared to stop him. The reason why Monty knew what to do with his tanks was the breaking of the Enigma code and later the Fish code. The Official Secrets Act prevented him from disclosing the source of his knowledge about Rommel's tank movements, until intelligence expert Winterbotham's 1974 book. German Enigma coding machines fell into British hands before the war, and they were able to work out how to decode all of the German coded radio transmissions sent between German forces and Berlin. West Germany continued to make and sell Enigma machines around the world after the war, so Britain refused to declassify the fact it had broken the codes, which enabled it British Intelligence to decode secret radio signals sent by countries in Africa, the Middle East and South America. **After 1943, the reason for British speedy "intuition" of enemy movements and plans was the down to the speed of the world's first programmable computer, Colossus, and a team of scientists back at Betchley Park in England, where it was finding possible code keys for the radio messages German forces were transmitting back to Berlin.**

After the Stalingrad defeat for Nazi tanks and bombers, the Soviet Union failed to learn the correct lesson (it was trapped all the while in the social revolution phase of Marxism as defined by Marx's *Communist Manifesto* of 1848, unable to ever achieve the promised freedom of equality without relaxing state police control and toppling due to insurgency), and thus bankrupted itself by building up a massive stockpile of main battle tanks (which were vulnerable to the neutron bomb), even after Moscow found it necessary to use 22 divisions to suppress the largely *unarmed* Hungarian revolution of 1956:

“The Hungarian revolution of October and November 1956 demonstrated the difficulty faced even by a vastly superior army in attempting to dominate hostile territory. The [Soviet Union] Red Army finally had to concentrate twenty-two divisions in order to crush a practically unarmed population. ... With proper tactics, nuclear war need not be as destructive as it appears when we think of [World War II nuclear city bombing like Hiroshima]. The high casualty estimates for nuclear war are based on the assumption that the most suitable targets are those of conventional warfare: cities to interdict communications ... With cities no longer serving as key elements in the communications system of the military forces, the risks of initiating city bombing may outweigh the gains which can be achieved. ...

“The elimination of area targets will place an upper limit on the size of weapons it will be profitable to use. Since fall-out becomes a serious problem [i.e. fallout contaminated areas which are so large that thousands of people would need to evacuate or shelter indoors for up to two weeks] only in the range of explosive power of 500 kilotons and above, it could be proposed that no weapon larger than 500 kilotons will be employed unless the enemy uses it first. Concurrently, the United States could take advantage of a new development which significantly reduces fall-out by eliminating the last stage of the fission-fusion-fission process.”

- Dr Henry Kissinger, *Nuclear Weapons and Foreign Policy*, Harper, New York, 1957, pp. 180-3, 228-9.

**Major Kenneth Macksey** concluded his brilliant analysis of history, *Technology in War: The Impact of Science on Weapon Development and Modern Battle* (Arms and Armour Press, London, 1986, p. 221): “the underestimation of land weapon defences before 1914 and the overestimation of the offensive power of air weapons before 1939 led to serious miscalculations, unfounded assumptions, and mistaken ambitions.”

It is the duty of civilized humanity to try to avert such disastrous casualty-causing mistakes and the culture of weapons effects hype which leads to them. The 9/11 terrorist attacks using hijacked American commercial aircraft in 2001 highlight the perils of trusting peacetime security to the elimination of “visible weapons” threats. The first Nazi bomber aircraft used in war was a converted civilian airliner, a Junkers Ju-52 which on 14 August 1936 bombed and destroyed a Republican battleship in the Spanish Civil War. Such aircraft were used again on 26 April 1937, bombing the town of Guernica, which surrendered without resistance two days later. It is not just a kamikaze or military bomber that can be improvised quickly using peaceful civilian aircraft: **Britain actually used the flat-decked civilian container ship *SS Atlantic Conveyor* as an aircraft carrier for vertical-take off Harrier jet planes and helicopters during the Falklands War.** In fact, the first British nuclear weapon test of 3 October 1952 used a 25 kt nuclear bomb inside the hull of a ship specifically to discover the effects of a subversive nuclear attack underwater in a harbor!



**Major Macksey** makes the point at the beginning of his book *Technology in War* (Arms and Armour Press, London, 1986, p. 7) that modern weapons, unstripped of popular media lying hype, have always had problems which chop down their vastly exaggerated capabilities over older weapons systems: "The first Industrial Revolution struck its roots in war and continued to be motivated by recurrent themes devised by inventors, promoted by entrepreneurs and governments seeking riches, fulfilment, aggrandizement, security and power. ... Indeed, in terms of accuracy and rate of fire, the long-bow that dominated battlefields in the 14th and 15th centuries remained superior to the 17th-century musket still in front-line service at the Battle of Waterloo in 1815."

A machine gun fires faster than a longbow, but it creates more noise, advertising an audible warning to troops to get down, to take cover. The flash of light ahead of the blast wave from a nuclear explosion does just the same, contrary to lies in films of explosions where the bang soundtrack is falsely synchronized with the flash.

#### Nuclear winter and related lies debunked by actual firestorm data

The "nuclear winter" is a deception, a cutback version of Stonier's "new ice age" myth from his book "Nuclear Disaster", which we review later in this post. Of thousands of nuclear test explosions, the one **"nuclear winter" from the Hiroshima fire storm blocked out the sun for 25 minutes (from burst time at 8:15 am until 8:40) in Hiroshima as shown by the meteorological sunshine records** printed in Figure 6 (3H) of **Drs. Ashley W. Oughterson, Henry L. Barnett, George V. LeRoy, Jack D. Rosenbaum, Averill A. Liebow, B. Aubrey Schneider, and E. Cuyler Hammond, Medical Effects of Atomic Bombs: The Report of the Joint Commission for the Investigation of the Effects of the Atomic Bomb in Japan, Volume 1, Office of the Air Surgeon, report NP-3036, April 19, 1951, U.S. Atomic Energy Commission**. Nobody is recorded as being a casualty from the 25 minutes of sunlight deprivation!

The reason? The soot is hygroscopic. It absorbs water and falls out in black rain. The firestorm took 30 minutes to start and was at peak intensity 2-3 hours later, so radioactive mushroom cloud been blown many miles downwind before the black rain occurred over Hiroshima, contrary to ignorant lies about "fallout radiation". The soot doesn't freeze the planet. The soot was instead rapidly precipitated in a self-induced rainout as was pointed out back in 1983 by J. B. Knox in Lawrence Livermore National Laboratory report UCRL-89907, which nuclear propaganda ignored. No other nuclear explosion ever created a firestorm. **Even those near naturally forested Pacific islands failed to ignite the vegetation by thermal radiation.**

Targeting oil wells instead of cities reduces the moisture effect, but the soot doesn't rise high enough from burning oil wells, as proved when Saddam set fire to all of Kuwait's oil fields. This has all been intensively researched and documented. Regarding the non-soot dust injected into the stratosphere, unlike soot it's not a strong absorber of sunlight and weather records were intensively studied for signs of both nuclear winter and ozone depletion during hundreds of megatons of atmospheric 1945-62 nuclear tests, with failure.

The initial gamma radiation from a nuclear explosion produces more ozone than it destroys. Gamma radiation produces large amounts of ozone from atmospheric oxygen regardless of the burst altitude, but ozone-destroying nitrogen oxides are only produced by the high-density air blast of low-altitude nuclear explosions. Those nitrogen oxides then combine with water vapour in the turbulent toroidal circulation of the mushroom cloud to form nitric acid, which does not destroy ozone but simply gets deposited, very diluted, in rain. This was proved in the 1970s when aircraft were flown through mushroom clouds from Chinese nuclear tests. In high altitude nuclear explosions, there is no compressed blast wave that forms nitrogen oxides, so you actually get a boost to the ozone layer since the explosion produces vast amounts of ozone due to the gamma radiation.

Even the "nuclear winter" from mass fires, dust, and other effects from the well-established *100 million megatons K-T explosion 65 million years ago* failed to wipe out plants and mammals. Instead, it made extinct the dangerous cold-blooded reptiles that were preventing freedom for peaceful mammal evolution. The idea that there is no protection and no possibility of surviving against a big explosion is false. Claiming that nuclear wars cannot be won if you lie and exaggerate the effects of nuclear weapons and the effects of nuclear war while downplaying countermeasures, is exactly what encouraged the terrorists to exploit the most feared weapons in the 1930s while peace-loving nations disarmed and thus effectively signed the death warrant for six million Jews on "peace treaties" with liars.

One of the Scientific American's Cold War publishers, **Gerard Piel, had a long history of lying and publishing lies about fires from nuclear weapons to attack civil defense readiness**, just as his predecessors did in Britain during the 1930s (which made the Prime Minister appease Hitler, encouraging him to start WWII). Typical example of lie:

"A heading in one recent report concerned with effects of nuclear detonations reads, 'Megatons Mean Fire Storms,' and the report predicts that a 20-megaton nuclear burst is sure to produce a 300-square mile fire storm. [Reference: **Gerard Piel (then the anti-civil defense publisher of the Scientific American), 'The Illusion of Civil Defense,' published in the Bulletin of the Atomic Scientists, February 1962, pp. 2-8.**] The report further states that blastproof bomb shelters afforded no protection in World War II fire storms, and the reader is left to conclude that vast fire storm areas in which there will be no survivors are an assured consequence of future nuclear attacks. ... the 40,000-50,000 persons killed by the fire storm at Hamburg constituted only 14 to 18 percent of the people in the fire storm area and 3 to 4 percent of Hamburg's total population at the time of the attack. ... Two of three buildings in a 4.5 square mile area were burning 20 minutes after the incendiary attack began at Hamburg, and similar figures were reported for other German fire storm cities."

**- Robert M. Rodden, Floyd I. John, and Richard Laurino, Exploratory Analysis of Fire Storms, Stanford Research Institute, AD616638, 1965, pages 1, 5.**

Media lying about the thermal ignitions (leading to lies about firestorms and nuclear winter caused by the soot of such fires blocking sunlight) can be traced back to the **secret classification of the full three-volume 1947 report on Hiroshima by the Strategic Bombing Survey, which was edited out of the brief single volume "summary" that the openly published a year earlier, 1946. Here is the key revelation (originally 'secret' May 1947 U.S. Strategic Bombing Survey report on Hiroshima, pp. 4-6):**

**'Six persons who had been in reinforced-concrete buildings within 3,200 feet [975 m] of air zero stated that black cotton black-out curtains were ignited by flash heat... A large proportion of over 1,000 persons questioned was, however, in agreement that a great majority of the original fires were started by debris falling on kitchen charcoal fires ... There had been practically no rain in the city for about 3 weeks. The velocity of the wind ... was not more than 5 miles [8 km] per hour.... Hundreds of fires were reported to have started in the centre of the city within 10 minutes after the explosion... almost no effort was made to fight this conflagration ... There were no automatic sprinkler systems in building...' [Emphasis added.]**

No modern city today is built out of 1945 Hiroshima style wood frame houses with charcoal stoves amid bamboo furnishings and paper screens. **Even Hiroshima is no longer built like that, it's a modern steel, concrete, and brick city and would not suffer a firestorm if a bomb dropped on it again.**

Even where city firestorms *have* actually occurred in obsolete wooden city areas of Japan and Europe, there was not a nuclear winter. What about the theoretical predictions that a nuclear attack on oil supplies will cause a nuclear winter, made by the founder of nuclear winter hype, Paul Crutzen? Saddam Hussein's Iraqi army invaded Kuwait and set all of its oil wells on fire as it was driven back into Iraq by America in 1991.

Peter Aldhous, 'Oil-well climate catastrophe?', *Nature*, vol. 349 (1991), p. 96:

"The fears expressed last week centred around the cloud of soot that would result if Kuwait's oil wells were set alight by Iraqi forces ... with effects similar to those of the 'nuclear winter' ... Paul Crutzen, from the Max Planck Institute for Chemistry in Mainz, has produced some rough calculations which predict a cloud of soot covering half of the Northern Hemisphere within 100 days. Crutzen ... estimates that temperatures beneath such a cloud could be reduced by 5-10 degrees C ..."

Dr Richard D. Small of Pacific-Sierra Research Corporation, California, responded in *Nature*, vol. 350 (1991), pp. 11-12, that 16,000 metric tons of actual soot is produced from 220,000 metric tons of oil burned every day, and anyway:

"My estimates of the smoke produced by destruction of Kuwait's oil wells and refineries and the smoke stabilization altitude do not support any of the purported impacts. The smoke is not injected high enough to spread over large areas of the Northern Hemisphere, nor is enough produced to cause a measurable temperature change or failure of the monsoons."

It turned out that the nuclear winter hype was false, because even if you do somehow manage to start a firestorm in the modern world (the overcrowded fire-hazard wooden medieval areas of Hamburg, Dresden, and **Hiroshima weren't rebuilt with wood after they burned in firestorms**), it simply doesn't produce a stable layer of soot in the stratosphere like the computer simulation. At Hiroshima the soot returned to the ground promptly because it is hygroscopic: it forms water droplets, rain. (It wasn't fallout: the firestorm took over 20 minutes to get going, by which time the radioactive mushroom cloud had been blown miles downwind.)



**Above:** the target for Sam Cohen's neutron bomb was these T-54/55 Russian main battle tanks, which had the highest production run of any tank ever made (over 86,000 were manufactured). They were manufactured chiefly for the invasion of Western Europe, once tactical nuclear weapons had been removed by political lobbying of Western disarmament activists via the Kremlin-controlled World Peace Council based in Moscow.

**"No passion so effectually robs the mind of all its powers of acting and reasoning as fear."** – Edmund Burke, *A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful* (1757)

**"The concessions of the weak are the concessions of fear."** – Edmund Burke, *Second Speech on Conciliation with America* (1775)

**"Better to be despised for too anxious apprehensions, than ruined by too confident a security."** – Edmund Burke, *Reflections on the Revolution in France* (1790)

**"Early and provident fear is the mother of safety."** – Edmund Burke, *Speech on the Petition of the Unitarians* (1792)

**How uncritical acceptance of eugenics pseudoscience by groupthink reverence in the 1930s helped to set the scene for the Holocaust, not the promised "utopia through lies"**

You may think that science needs to be perverted in order to safeguard humanity. Wrong. Lying does the opposite. Here is the disproof of the frequently made claim that "lying safeguards peace". Many people prefer desperately try to live in George Orwell's "big brother" world of 1984 **groupthink**, despite the fact that many millions of people have died defending freedom. Nazism sprang from a pseudoscience that few wanted to debunk until they saw the final solution's results in 1945. They thought the lies of eugenics were a fashionable scientific idea in the 1930s, so hardly anybody opposed it when they had a chance (as we will document later in this post, in reviewing Wheeler-Bennett's *Munich: Prologue to Tragedy* and President Kennedy's *Why England Slept*, which present a very different first-hand history to the later pro-fascist revisionists who did not live through the 1930s). Instead, in the 1930s up to the Munich conference in 1938 and even beyond, Hitler's Nazi racist eugenics was fashionable science that was regarded as "harmless" by the world's leaders, media, and public who were blinded by lies on aerial gas attacks, just like support for pseudoscience against civil defense by Nobel Laureates today.

I recommend a study of the 1935 Alexis Carrel book "Man, the Unknown", which advocated the pseudoscientific use of eugenics to create a "super-race". Notice particularly that the book was hyped and praised around the world because the author and eugenicist Carrel had won the Nobel Prize in Physiology or Medicine in 1912. **In the 1936 Nazi edition, Carrel added the following passage: "(t)he German government has taken energetic measures against the propagation of the defective, the mentally diseased, and the criminal."**

**Carrel wrote:**

**“Those who have ... misled the public in important matters [which to the Nazis meant the Jews], should be humanely and economically disposed of in small euthanasic institutions supplied with proper gasses.”**

On 2 August 1937, well before the final solution of gas chambers and well before the Munich crisis when Prime Minister Chamberlain so eagerly shook hands with Hitler before the cameras of the world's press, Britain's *Manchester Guardian* newspaper reported the construction of 40 new concentration camps in Germany. *The proud man of peace had to turn a blind eye to racism because Britain had no civil defense and because Britain exaggerated the strategic bombing threat.*

**(Eugenics was pseudoscience**, and contrary to Darwin's evolutionary theory of the "survival of the fittest" instead of being supported by it, because the whole basis of biology is to allow the variations necessary for evolution to occur where it is most necessary. E.g., by definition you can't plan a "super-race" in advance to survive a new strain of super-flu virus which itself hasn't even yet evolved. Put another way, if the "super-race" idea was so clever, nature could have used simple cloning in reproduction, omitting the much harder and more complex reproduction methods necessary to preserve the potential for variation in offspring. Variation and thus the individual uniqueness intrinsic to diversity has always been vital to survival of the fittest in evolution, because the definition of "fittest" is completely subjective, varying with the environment and circumstances, rather than a universally defined parameter: if you put all its your eggs in one basket, then all your eggs will be vulnerable. Blonde hair and blue eyes might correlate to increased skin cancer risks under certain environmental conditions, or inbred stupidity. By analogy, if you artificially "clone" people mentally by teaching everyone in the same classroom in precisely the same way, instead of allowing individual variation through differing individual projects and field experience, you make them all into mental clones, ending up with the risk of **groupthink failure**, one reason why Hitler lost his war after literally "shooting the messengers" in removing real critics from his circle of advisers, and why groupthink-type political control of some failed Western military projects have caused them to end in failure.)

Now whose idea was it to gas six million Jews? A Nobel prize winner? Who is responsible? Obviously his pseudoscience was warped and misapplied still further by the evil Nazis, but he certainly did nothing to help prevent the Holocaust by his lying pseudoscience. Nor did the media which praised the lying pseudoscience. The guy actually thought his eugenics by gassing races which allegedly "misled the public in important matters" was a benefit to humanity. This is what can happen when people let lies in science get out of hand. Lies need to be exposed and sorted out, not praised and hyped by the media. There are other examples of the terrible dangers that can occur when a conspiracy of hysterically paranoid and fanatically science-hating nutters in the media, and their fan clubs in the misled general public, tries to lynch those who just want a fair hearing for facts.

We need to know the facts, even if they are unpleasant, because technology and its application depend ultimately upon facts in science.

If science is held up by nutters, the future development of life saving technology will be held up. Particle physics based on facts led to various unexpected innovations in medicine. If Lord Kelvin had been allowed to stop research on radioactivity (which contradicted his false "vortex atom" theory), radiotherapy against cancer would have been affected. Thus, theoretical lies are a danger.

You might love the "big brother" of fashionable consensus, but this can be a grave danger. Science isn't a religion of worshipping status quo consensus or fashionable lies! Science is not some kind of fanatical, lying, obfuscating religion hell bent on promoting lies supporting the extermination of races, by gassing human beings.

**“The power of holding two contradictory beliefs in one's mind simultaneously, and accepting both of them...To tell deliberate lies while genuinely believing in them, to forget any fact that has become inconvenient, and then, when it becomes necessary again, to draw it back from oblivion for just so long as it is needed, to deny the existence of objective reality and all the while to take account of the reality which one denies — all this is indispensably necessary.” [Doublethink defined in George Orwell's 1948 novel "Nineteen Eighty-Four", Martin Secker & Warburg Ltd, London, part 1, chapter 3, p 32.]**

“Crimestop means the faculty of stopping short, as though by instinct, at the threshold of any dangerous thought. It includes the power of not grasping analogies, of failing to perceive logical errors, of misunderstanding the simplest arguments if they are inimical to Ingsoc, and of being bored or repelled by any train of thought which is capable of leading in a heretical direction. Crimestop, in short, means protective stupidity.”

– George Orwell, *Nineteen Eighty Four*, Chancellor Press, London, 1984, p225.

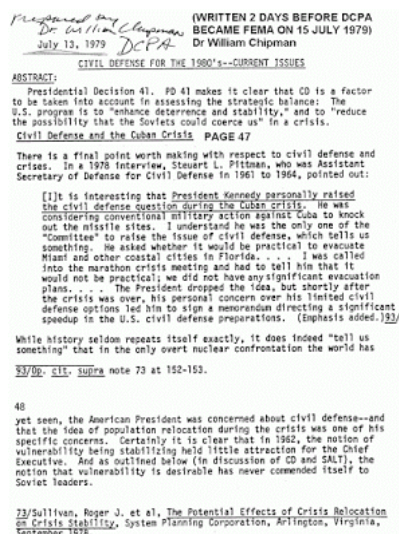
**“Groupthink is a type of thought within a deeply cohesive in-group whose members try to minimize conflict and reach consensus without critically testing, analyzing, and evaluating ideas. It is a second potential negative consequence of group cohesion. ... cohesiveness prevented contradictory views from being expressed and subsequently evaluated. As defined by Janis, ‘A mode of thinking that people engage in when they are deeply involved in a cohesive in-group, when the members' strivings for unanimity override their motivation to realistically appraise alternative courses of action.’ ... Individual creativity, uniqueness, and independent thinking are lost in the pursuit of group cohesiveness, as are the advantages of reasonable balance in choice and thought that might normally be obtained by making decisions as a group. During groupthink, members of the group avoid promoting viewpoints outside the comfort zone of consensus thinking. A variety of motives for this may exist such as a desire to avoid being seen as foolish, or a desire to avoid embarrassing or angering other members of the group. Groupthink may cause groups to make hasty, irrational decisions, where individual doubts are set aside, for fear of upsetting the group's balance.” - Wikipedia.**

“We are told that if the deterrent is to be credible, we must take measures to minimize the casualties of a nuclear war, and thus show the enemy that we are not afraid of such a war. Civil Defense measures, are, therefore, being urged on the public. ‘Protect and Survive’ is the slogan in the United Kingdom, and similar campaigns are being mounted in other countries. The suggested civil defense measures would be laughable if they did not carry such tragic consequences. They will not convince the enemy, but they may lull the population into a false sense of security. If the public is made to believe that the casualty toll can be greatly reduced by civil defense measures, then a nuclear war becomes more likely.”

- Professor Joseph Rotblat, *Bulletin of the Atomic Scientists*, January 1981, page 34.

As we discuss later in this post, everything Rotblat stated was disproved by both World Wars. Rotblat followed Sir Norman Angell, Sir Joseph Chamberlain, and other peace activists in making up claims which are false. If Britain or America were led by a Hitler intent on world domination, then having civil defense would truly increase the risk of war. If the enemy wants to attack and is worried about our having civil defense, they will attack now instead of waiting for us to get civil defense

which will mitigate the effects! Rotblat is not just absurdly illogical in his contrived lies, he omits the facts on the effects of nuclear weapons (making false claims). The same claim was made about gas masks issued to everybody in Britain before World War II. If we don't have them, we're safe from war. No hospital? Then you cannot get ill. If we have civil defense, there is war psychology. If we have hospitals, we will think ourselves into ill health. If you want health, be positive and have no insurance. If you have a seatbelt in a car, are you more likely to have an accident? What about lifeboats and lifejackets on ships? Hospitals? Ambulances? First aid kits? Insurance? Get rid of all this, and you will be *guaranteed* to be safer: "If the public is made to believe that the casualty toll can be greatly reduced by civil defense measures, then a nuclear war becomes more likely." - Rotblat.



William Chipman (head of FEMA's civil defense in Reagan's administration) had *previously* debunked all of the Rotblat-style lying propaganda against civil defense in his report *Civil defense for the 1980s - Current Issues* U. S. Department of Defense, Defense Civil Preparedness Agency (DCPA), 13 July 1979, PDF version linked here (note that DCPA was incorporated within FEMA two days later, on 15 July 1979; unlike DCPA, FEMA is not a U. S. Department of Defense agency, but includes natural disaster planning for earthquakes, floods, tornadoes and hurricanes as well as terrorist warfare). In particular, see on pages 47-48 President Kennedy's request for civil defense evacuation of Miami and other coastal cities in Florida during the Cuban missiles crisis to Assistant Secretary of Defense for Civil Defense, Stuart L. Pittman, who had to reply to Kennedy that he had no plans ready to evacuate those cities: "after the crisis was over, his [Kennedy's] personal concern over his limited civil defense options led him to sign a memorandum directing a significant speedup of the U. S. civil defense preparations." Chipman comments on page 48: "the American President was concerned about civil defense ... in 1962, the notion of vulnerability being stabilizing held little attraction for the Chief Executive." Chipman has recently written about *Readiness for Terrorist Nuclear Threats* for Strategic Defense, recommending republication of revised civil defense manuals:

"Revise the following materials to emphasize terrorist threats: (a) FEMA publication H-21, Nuclear Attack Environment Handbook, August 1990, to provide a handbook essential to training at EMI and in the States; (b) FEMA H-20, Protection in the Nuclear Age, 1985, a 38-page booklet for the citizen on weapons effects and means of protection; and (c) standby emergency public information (EPI) videos of c. 1989 on weapons effects and means of protection, and parallel radio EPI materials. Conclusion: It is essential to develop readiness to reduce casualties, should terrorists detonate a nuclear weapon in the U.S. Their interest in killing our citizens is now undeniable, and the casualties from a nuclear burst in a U.S. city could exceed those in New York by more than an order of magnitude (be over 10 times as great). While massive casualties can only be reduced, not eliminated, it would be imprudent to neglect steps with potential to reduce casualties substantially."

Contrary to lies from Rotblat about civil defense or ABM making nuclear war "more likely", it was actually the lack of such preparations in 1962 which forced Kennedy into relying on a military blockade and issuing the 22 October 1962 ultimatum to the Soviet Union on American TV: "The 1930's taught us a clear lesson: aggressive conduct, if allowed to go unchecked, ultimately leads to war. This nation is opposed to war. ... To halt this offensive buildup, a strict quarantine on all offensive military equipment under shipment to Cuba is being initiated. All ships of any kind bound for Cuba from whatever nation or port will, if found to contain cargoes of offensive weapons, be turned back. ... It shall be the policy of this Nation to regard any nuclear missile launched from Cuba against any nation in the Western Hemisphere as an attack by the Soviet Union on the United States, requiring a full retaliatory response upon the Soviet Union." The problem with this "I will start World War III if you fire one nuclear missile"-policy is called escalation: it contained the risk that if some Russians had managed to launch just one single nuclear missile from Cuba, by misunderstanding, accident or insanity, then the risk of escalation and the price in human lives would have been much higher than with adequate civil defense, which can in crises provide a mechanism to reduce the scale of a potential disaster and to de-escalate a crisis.

Kennedy increased civil defense spending because he had seen the tragedy of the lack of civil defense in Britain at Munich, while studying the origins of World War II first-hand for his excellent civil defense college thesis *Why England Slept*, where he points out that Rotblat-style left-wing political attacks on Britain's civil defense in the 1930s led to a lack of preparation in civil defense and thus intimidation of the Prime Minister by Hitler's war threats at Munich, *escalating the 1930s crises*. Adequate civil defense would have stabilized the crises by preventing so much political intimidation, panic, wanton fear, procrastination, and indecision. On 2 August 1937, well before the final solution of gas chambers and well before the Munich crisis when Prime Minister Chamberlain so eagerly shook hands with Hitler before the cameras of the world's press, Britain's *Manchester Guardian* newspaper reported the construction of 40 new concentration camps in Germany. *The proud man of peace had to turn a blind eye to racism because Britain had no civil defense and because Britain exaggerated the strategic bombing threat*.

While a 23 year old student in 1940, President John F. Kennedy wrote a penetrating analysis of the cause of World War II, published as *Why England Slept*. Unlike



other history books, it draws the political lessons which Kennedy later used, as American President, to avert war during the Cuban missiles crisis in October 1962. A few of the key points from John F. Kennedy's book "Why England Slept", Sidgwick & Jackson, London, 1962 (first published 1940) must be quoted since they are so vital today:

Page 7: "What had England been doing while Hitler was building up this tremendous German Army?... To say that all the blame must rest on the shoulders of Neville Chamberlain or of Stanley Baldwin is to overlook the obvious. As the leaders, they are, of course, gravely and seriously responsible. But, given the conditions of democratic government, a free press, public elections, and a cabinet responsible to Parliament and thus to the people, given rule by the majority, it is unreasonable to blame the entire situation on one man or group."

[The fault therefore lies in greed of the democratic system to save money by cutting back on necessary defences, and to use lying exaggerations of the effects of weapons and lying underplaying of the value of civil defense to save lives and to make deterrence and coercion of thugs credible, to defend a lack of funding for civil defense. Kennedy pointed out that the American President, Roosevelt, in a speech in Chicago in October 1937 recommended a policy to "quarantine the aggressors", but Roosevelt's subsequent requests for higher American defence spending were not approved by Congress: even President Roosevelt's winter 1939 Naval appropriation for 1940 was cut down from \$1,300 million to \$800 million, by U. S. Congress. Therefore, *even a keyed-up leader who wants to act may be rendered unable to deter a Pearl Harbor by the consensus of elected representatives in a democracy. The only way is to overcome apathy, to answer critics convincingly, and to fight through the media for defense measures. Secrecy and an unwillingness to defend civil defense in the media can lead to a failure of deterrence by democracies.*]

Page 9: "I do not believe necessarily that if Hitler wins the present war he will continue on his course towards world domination. He may well be too exhausted, or he may be satisfied with what he has obtained. But, in the light of what has happened in the last five years, we cannot depend on it."

Page 13: "In a Democracy, especially, where a majority must share the idea before it becomes part of the national viewpoint, it is necessary to study the fundamentals upon which the public's opinions are based."

Page 14: "... *the Englishman had to be taught the need for armaments*; his natural instincts were strongly against them. Internally, armaments were a menace to his economic security, as they must be paid for out of higher taxes; externally, they were a menace to his conception of a peaceful World order based on the League of Nations."

Page 16: "The statement of Lord Grey, British Foreign Minister, made in 1914, that, 'The enormous growth of armaments in Europe, the sense of insecurity, and fear caused by them; it was these that made war inevitable,' had a tremendous effect on post-war British opinion. Armaments were looked upon as something horrible, as being the cause of war, not a means of defence. Again and again, through the 'thirties, opponents of rearmament quoted Grey."

Page 46: "[B.H.] Liddell-Hart [author of 'The Defence of Britain'] held that for a country situated as was Britain, her greatest strength would lie in building up her defences in order to prevent a knockout blow, and then blockading the enemy into surrender. This theory was excellent..." [This blockade policy was adapted by President Kennedy later during the Cuban missiles crisis on 22 October 1962.]

Page 84: "... the German locomotive industry, for example, was assigned to the manufacture of tanks... It is difficult to keep track of manufacturing in a foreign country, especially in a country like Germany, where all the preparations were guarded in totalitarian secrecy... Britain... had to go through the preliminary 'tooling-up' period, which cost her nearly two years."

Page 99: "Hitler's propaganda and speeches were so effective that they numbed any reaction that the British felt from the reintroduction of conscription or the invasion of the Rhineland."

Page 169: "... I believe, as I have stated frequently, that leaders are responsible for their failures only in the governing sector and cannot be held responsible for the failure of a nation as a whole... I believe it is one of democracy's failings that it seeks to make scapegoats for its own weaknesses."

Page 170: "Herbert Morrison, the able British Labour Leader... was being criticised in 1939 for co-operating with the Government in their voluntary National Service: 'At the beginning I got plenty of abuse from the irresponsibles because I said that Labour administrators must play their full part in A.R.P. [Air Raid Precautions, later renamed civil defence], which was denounced as a fraud and a plot... to create war psychology. For Labour local authorities to co-operate with state departments in this task was treachery... no A.R.P. could possibly be effective'."

Page 171: "... England has been a testing-ground. It has been a case of a democratic form of government, with a capitalistic economy, trying to compete with the new totalitarian system, based on an economy of rigid state control."

Page 176-7: "In England we can see vividly where democracy failed. In the case of the A.R.P., for example, the Government failed to get volunteers until after Munich had driven home the seriousness of the situation. But Germany had 12,000,000 members by 1936. She needed no such shock to build up this vital defence measure. Should England have forced people to join? Yes, if the A.R.P. is considered the vital thing. No, if the democratic system is considered the important factor, as freedom of the individual is in essence democracy.

"Again we witnessed the struggle between the National Government and the local government as to who should bear the burden of the cost of the A.R.P. Should the Government have forced the local authorities to provide their quotas? Freedom of local governments from centralised control is one of the cornerstones upon which we have erected our democracy.

"Should the Trade Unions have been forced to co-operate with the Government long before May of 1940? Should strikes have been outlawed, labour standards disregarded, men forced to go into trades and do work to which they were opposed? The smashing of the Trade Union is symbolic of Fascism. The right of labour to strike, the right to decent wages and decent hours, have been what democracy has boasted is fundamental to its success..."

Page 177: "We must be prepared to recognise democracy's weaknesses and capitalism's weaknesses in competition with a totalitarian form of

government. We must realise that one is a system geared for peace, the other for war. We must recognise that while one may have greater endurance, it is not immune to swift destruction by the other.”

Page 178: “... we must realise that a democracy finds it difficult to keep up this sustained effort over a long period of time, for the interests of the individual are not directly concerned with armaments. He must make a great personal sacrifice to build them up [hence the immense cold war defence spending tax revenue per person of population here, so often quoted by Richard Rhodes and freedom cynics as a waste of money on deterrent arms never used in anger], and it is hard to maintain this sacrifice year in and year out. Especially it is complicated by the fact that a democracy’s free Press gives the speeches of the totalitarian leaders who state their case in such a ‘reasonable’ manner that it is hard always to see them as a menace.”

Page 179: “... the dictator is able to know exactly how much the democracy is bluffing, because of the free Press, radio, and so forth, and so can plan his moves accordingly.”

This claim by Kennedy misses one tragic and inadvertent bluff: Prime Minister Chamberlain actually was bluffing when repeatedly trying to assure peace to Hitler at Munich and in countless signed agreements and peace treaties, but then finally – having convinced Hitler that Britain had no stomach for war – he had to do the opposite and declare war (at the threat of his Cabinet all resigning if he didn't declare war) when Hitler effectively broke the camel's back by adding the final straw of invading Poland. Chamberlain did issue Hitler a threat of war in the case of Poland, but this was too late to have any deterrent effect.

Precisely the same thing was done in 1914 by British Foreign Secretary Edward Grey, who refused to clearly threaten war against Germany if Germany invaded Belgium until it was too late for all the mobilization and preparation in Germany to be stopped. Chamberlain in 1938-9 and Grey in 1914 both first convinced Germany that Britain was too weak to defend Poland/Belgium - so Britain failed to credibly deter invasions - then having convinced the enemy it was weak, it then declared war with its back against the wall. It's like an armed policeman failing to threaten an armed thug out of desire to maintain “good manners” and not to invite any risk of escalating the situation, and then – when dying from being shot by the thug – feverishly trying to shoot the thug in the back out of revenge. That is not the purpose of issuing weapons. Weapons are not issued to enable people to take revenge. The armed policeman doesn't behave weakly out of social niceties and then take revenge after being shot and killed. He tries to de-escalate situation and deter the thug from shooting by threatening to shoot first at the first signs of trouble, because (counter-intuitively to those who live in idealistic ivory towers), *human nature in general respects strength but disrespects weakness!*

Page 180: “We must always keep our armaments equal to our commitments. Munich should teach us that; we must realise that any bluff will be called. We cannot tell anyone to keep out of our hemisphere unless our armaments *and the people behind these armaments* are prepared to back up the command, even to the ultimate point of going to war. ... If we had not been surrounded by oceans three and five thousand miles wide, we ourselves might be caving in at some Munich of the Western World.”

Clearly, it is possible that some people will behave differently in some circumstances if they have health insurance, lifeboats, seatbelts, and civil defense, and it is even possible that a peace-loving, freedom-loving democracy will be able to declare a war in exceptional circumstances when it has civil defense, that it could not declare without civil defense. However, Rotblat ignores the actual fact that the utility of civil defense in helping to start a war was a benefit to humanity, because *the effects of bombs were less than 100% lethal, unlike concentration camp diseases and starvation ending up with Zyklon B pesticide in gas chambers. Hitler didn't declare war on Britain. He invaded Poland, and Britain finally declared war on Hitler because Britain finally wanted to do something, albeit far too late to avert another World War.* Rotblat ignores in particular the fact that if Britain had civil defense sooner than August 1939, it could have threatened Hitler earlier and more credibly called Hitler's bluff when he had only a 6-week munitions supply, and put the Nazis out of business either by deterring Nazi invasions and racist excesses (Nazi racism did not begin with the gas chambers, but was plain from the very beginning), or else militarily stopped him with a limited war, before the Nazis had built up strength through their invasions.

Hitler had been **brainwashed by appeasement from Prime Minister Chamberlain (contract photo linked here) that Britain would never start another war under any circumstances, so Hitler thought he was safe from a world war** (the Nazis at Munich had only a 6-weeks munitions supply and could have been stopped relatively easily as we will prove later in the post, using both the actual figures for the 1930s arms race and the intelligence estimates which were given to Chamberlain). Civil defense did vitally contribute to a war psychology in Britain that enabled Britain to stand up to Hitler, but it was implemented far too late to help to intimidate Hitler into not invading most of Europe. Silence from Rotblat on this issue! In 1981, the military strength of the Soviet Union was at a peak ratio to that of the West, and Rotblat supported the propaganda coming from the Kremlin-controlled World Peace Council, whose aim it was to soften up Western Europe for invasion, by unilateral disarmament.

Civil defense, *implemented far too late* to avert World War II by allowing opposition to the Nazis when they could be stopped, at least allowed Britain to finally oppose Hitler, instead of allowing world Nazi domination. Tragic? That depends on whether you view death by bombs or orderly annihilation in “peaceful” gas chambers and concentration camps (or Siberian salt mines) any differently. Rotblat worked at Los Alamos on the nuclear bomb, but left when Germany was defeated. He didn't want the bomb dropped on Japan: he preferred conventional warfare against Japan, the planned million casualties in an invasion, or maybe he thought that there was some other way out. He feared the Nazis more than Stalin, despite the fact that Stalin actually murdered millions more than Hitler (40 millions). Rotblat was entitled to say what he wanted and do what he wanted in a free world but he is not entitled to impunity from criticism. He repeated lies attacking civil defense for political ends during the Cold War.

Rotblat is not the only Nobel Laureate to win big prizes for telling lies, as we will see. Nobel himself exaggerated weapons effects for profit when selling explosives to both sides in the Crimean War, which provided blood money to fund supposedly glorious prizes. Odd that Rotblat accepted capitalist-funded military-industrial complex prize money! Nobel Peace Prizes were also awarded for lies to **Sir Norman Angell (lies: Hitler can't hurt anyone because war is a great illusion, no nation can gain from war, wars cost the initiators so much that nobody sane will start one, so don't fear Hitler)** and **Sir Austin Chamberlain (lie: peace can be secured and we can all sleep soundly by collecting autographs from thugs on worthless bits of paper, peace treaties).**

## Introduction

*[There is] a tendency in our planning to confuse the unfamiliar with the improbable. The contingency we have not considered looks strange; what looks strange is therefore improbable; what seems improbable need not be considered seriously.*

— Thomas C. Schelling, in Roberta Wohlstetter, *Pearl Harbor: Warning and Decision*, Stanford University Press, 1962, p. vii.

"The idea that warfare might destroy civilization, perhaps even exterminate humanity, was already familiar to the public in the 1930s. ... the public felt it would be chemical explosives and poison gas that might bring a new dark age. The image of a new world war ... leading to utter destruction and barbarism, was widespread in popular journalism and stories, and even in a movie, *Things to Come* [1936]. During the 1930s this imagery may have retarded the acceptance of civil defense in the most threatened nation, Great Britain, where many argued that precautions would be futile."

- Dr Spencer R. Weart, "History of American attitudes to civil defense", chapter 2 of Professors John Dowling and Evans M. Harrell (editors), *Civil Defense: A Choice of Disasters*, American Institute of Physics, New York, 1987, p. 11.

Although detection of the first Russian nuclear weapon test in 1949 sparked the publication of **Glasstone's civil defense data manual, *Effects of Atomic Weapons*, in 1950**, Dr Weart points out in *Civil Defense: A Choice of Disasters* that it was the communist-backed invasion of South Korea in the Korean War of 1950-53 that led President Truman to create the Federal Civil Defense Administration as an insurance against escalation to nuclear warfare, and on page 13 he states that in 1951 alone it handed out 20,000,000 copies of ***Survival Under Atomic Attack***. Dr Weart adds on page 24 that during the October 1962 crisis: "The largest building supplies store in Washington sold out of sandbags on the day after Kennedy's speech announcing a blockade of Cuba." The first chapter by Dr Paul P. Craig in *Civil Defense: A Choice of Disasters* on page 3 makes the point that the Battle of Britain was actually *won* by a combination of *imperfect* civil defense with the relatively *ineffective* Royal Air Force fighter defense, that could only shoot down an average of 10% of the enemy bombers on each raid. However, because civil defense minimized casualties, it enabled Britain to survive repeated bombing raids, during which more and more of the Nazi bombers could be shot down, proving that civil defense and *relatively ineffective* air defense in combination together can lead to victory:

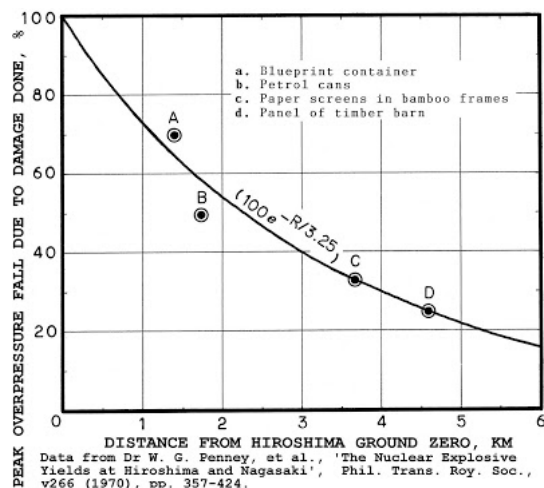
"... though the Royal Air Force was able to down only about 10% of the incoming planes, by the time three or four raids were mounted by the Nazi's, only 65% or so of the initial planes were still flying. An attrition rate of 10% per raid was quite enough to effectively demolish the Nazi attack [in combination with civil defense mitigation of the effects of a long run of repeated attacks], and to allow England to finally win the Battle of Britain."

Page ix of the Preface by the editors (physics professor John Dowling and mathematics professor Evans M. Harrell) of *Civil Defense: A Choice of Disasters* points out that the increasing accuracy of satellite and inertially guided missile systems and the development of **MIRVed missiles** in the 1960s led to a massive reduction in the explosive yields of individual nuclear warheads on both sides as the Cold War progressed (from 9-25 megatons in the 1950s to the 100 kt W76 warheads and 475 kt W88 warheads and similar Russian equivalents):

"The higher the accuracy, the lower the yield needed. **MIRVing** means more warheads to contend with, but they generally have lower yields. A successful SDI [ABM system] would ensure that few warheads would penetrate our defenses, and consequently, make civil defense much, much easier. A successful SDI would make a strong case for implementing a comprehensive civil defense program. Often the consideration of interaction between the arms race and civil defense has been left out of the debate."

Herman Kahn points out in Appendix III of his 1960 book *On Thermonuclear War* that if the severe damage radius of a nuclear explosion is  $R$  and the missile Circular Error Parameter (CEP) distance (the radius from the intended target within which 50% of warheads fall) is  $C$ , then the probability of a target surviving  $n$  warheads is simply  $S = (1/2)^x$  where  $x = n(R/C)^2$ . (Note that Kahn's formula assumes 0% survival chance for a direct hit, which is obviously incorrect for *very hard buried targets* like the bunker under the Kremlin which is reportedly deeper than the **crater rupture zone depth for the revised crater dimensions law at high yields**, but such deep targets can still be destroyed either by earth-penetrator warheads or by a repeated sequence of ground bursts in the craters formed by prior detonations.) Since  $R$  generally scales as only the cube-root of the bomb yield, it follows that for constant survival probability the payoff from a given increase in missile accuracy is larger than the effect from varying the weapon yield. Hence, many individual bombs each with smaller yields but improved accuracy are preferred to a fewer heavier higher-yield warheads, since they are more destructive to hardened counterforce targets (missiles in silos, underground enemy command posts, tanks, submarines, etc.) while producing *less collateral damage to civilians since the amount of fallout radioactivity (unlike blast and cratering areas) scales directly with the yield*.

There is an immense blast collateral damage inefficiency of the nuclear bomb as compared to conventional weapons, due to the fact that *blast damage areas due to peak overpressure are proportional to the two-thirds power of yield*. E.g., a 1 kg TNT bomb is a thousand million times smaller in blast energy than a 1 megaton blast, but it produces equal peak overpressures over an area equal to  $(10^{-9})^{2/3} = 10^{-6}$  of that of a 1 megaton blast. Therefore, one million separate 1 kg TNT bombs, or 1 kiloton of TNT, is exactly equivalent to a single explosion of 1 megaton of TNT. **This explains why the blast effects from a megaton bomb are approximately equal to a 1 kiloton World War II conventional bomber attack, with a hundred or more aircraft each scattering a few tons of TNT in small bombs over a large area target (so that there is little probability of severe blast area overlap, i.e. the wasteful "overkill" effect).** But all nuclear weapons media propaganda ignores such facts, presenting a megaton explosion over a city as an unparalleled disaster, a thousand times worse than a large World War II attack!



**Above:** some of Penney's 1970 published data for the attenuation of peak blast overpressure by the act of causing destruction in Hiroshima and Nagasaki, which lowers the peak overpressure in a city relative to that over unobstructed terrain. This effect means that the desert nuclear test-validated cube-root distance scaling law severely exaggerates peak overpressures at large distances from nuclear weapons exploding in or over cities. The very first edition of Glasstone's nuclear effects handbook, *The Effects of Atomic Weapons*, 1950, on page 57 has a section written by John von Neumann and Fredrick Reines of Los Alamos (it is attributed to them in a footnote) stating factually:

"... the structures ... have the additional complicating property of not being rigid. This means that they do not merely deflect the shock wave, but they also absorb energy from it at each reflection.

"The removal of energy from the blast in this manner decreases the shock pressure at any given distance from the point of detonation to a value somewhat below that which it would have been in the absence of dissipative objects, such as buildings."

This was removed from future editions. This isn't speculative guesswork: it's down to the conservation of energy. I emailed Dr Harold L. Brode and other experts about why it isn't included in American nuclear weapons effects manuals. Dr Brode kindly replied with some relevant and interesting facts about non-radial energy flows in Mach waves and the transfer of energy from the blast wave to flying debris (which, alas, travels slower than the supersonic shock front because the blast wind is always slower than the shock front velocity). It is true that the energy loss from the blast wave near ground level is partially offset by downward diffraction of energy from the diverging blast wave at higher altitudes. However, this downward diffraction process is not a 100% efficient compensator for energy loss, particularly for the kinetic energy of the air (the dynamic pressure or wind drag effect). The dynamic pressure (which in unobstructed desert or ocean nuclear tests makes the blast more hazardous for higher yield weapons) is an air *particle* effect not a *wave* effect so it does not diffract like a wave, and it is cut down severely when transferring its energy to building debris. Even if every house absorbs just 1% of the incident energy per unit of area incident to the blast, then the destruction of a line of 100 houses cuts the blast energy down to  $0.99^{100} = 0.366$  of what it would be over a desert surface. Basically, this chops down the collateral blast damage from large yield weapons detonated in cities and affects the usual scaling laws, making nuclear weapons even less dangerous than predicted by the textbook equations and curves.

Kahn also points out that disarmament propaganda efforts continued to *help the fascist states by hindering deterrence and civil defense efforts right up to the outbreak of World War II in Europe*, and America's pacifist neutrality up to that time towards fascists *did not protect it against a surprise attack from Japan*. So it's no good having an "unthinkable" view of weapons which can't actually deter those aggressive actions which will escalate after horrific conventional warfare to end only with nuclear attacks. In World War II, the failure to credibly deter Japan from attacking caused the escalation to conventional fighting and the counter-escalation by the use of two nuclear weapons on Hiroshima and Nagasaki, which finished the war. In order to reduce the risk of being attacked by nuclear weapons, you need to have effective civil defense. Disarmament is not an option because having no weapons did not save millions of people from extermination by the fascists and communists of Hitler and Stalin. Trying to "find common ground" was the appeasement policy tried by Chamberlain, which also *proved to be helpful* to the Nazis, as explained in the review of the Wheeler-Bennett book *Munich: Prologue to Tragedy*, below.

**Si vis pacem, para bellum: if you wish for peace, prepare for war; at the very least have some civil defense so that your potential civilian targets are not too appealing to terrorists.** Don't be weak if you want peace, or you will be intimidated and pushed into a corner sooner or later, where you will have to fight with your back to the wall or surrender. Peace activism has always resorted to lying about weapons effects and the effects of war, while downplaying the effects of not having war. As we shall see later on, Herman Kahn correctly argued in *On Thermonuclear War* that a lack of credible civil defence and assertiveness in Britain encouraged thugs and led to war, which could have been prevented at minimal cost if Britain had been less pacifist in the 1930s. **(Herman Kahn's excellent 1960 RAND Corporation paper P-1888-RC, *The Nature and Feasibility of War and Deterrence*, linked here, argues that it is no good for nuclear weapons just to deter nuclear war, they must also deter "Pearl Harbor" or "Munich"-type crises, such as when Hitler invaded Czechoslovakia in 1938 through the failure of deterrence: nuclear weapons must deter not only nuclear war but also invasions and threats that would otherwise escalate rapidly towards World War.)** It is the lying from the disarmament activists on civil defense which was most exploited in Nazi 1930s propaganda to force Britain's leaders (supported by the equally mis-informed population) to support appeasement. Two of the key lies in the 1930s:

(1) Weapons cause wars and suffering. The "weapons cause wars" lie asserts falsely that World War I was caused by a weapons arms race, not by British Foreign Minister Lord Edward Grey behaving weakly towards Germany in 1914, which was also exactly how British Prime Minister Chamberlain (acting, as he said, as "his own Foreign Secretary") behaved towards Germany nearly 25 years later. In each case, World War resulted. **Lord Grey in 1914 failed to make it clear to Germany in good time that Britain would go to war if Germany invaded Belgium: "When he finally did make such communication, German forces were already massed at the Belgian border, and Helmuth von Moltke convinced Kaiser Wilhelm II it was too late to change the plan of attack."**



The Germany Navy during the Kaiser's War Cabinet on 8 December 1912 set a date for war 18 months in the future, as reported in the *Diary* of Admiral Muller: "General von Moltke [German army chief] said: I believe war is unavoidable; war the sooner the better. But we ought to do more to press to prepare the popularity of a war against Russia. The Kaiser supported this. Tirpitz [German Navy chief] said that the navy would prefer to see the postponement of the great fight for one and a half years." British historian A. J. P. Taylor's 1969 *War by Timetable* argues that railway timetables made World War I inevitable, and were the reason why Moltke was able to convince the Kaiser to go ahead on 1 August, when 11,000 trains were mobilizing German troops according to an inflexible plan. Millions of soldiers had to be transported using complex, inflexible railway timetables such as the Schlieffen Plan of 1897-1906, which took almost a decade to complete. Taylor points out that each country had just one railway mobilization plan (Plan 17 in France, Plan A in Russia, etc.), and there were no electronic computers available with which to quickly modify these plans. For example, when the Tsar wanted to mobilize against Austria, he had to order general mobilization, because there was no alternative plan and planning was too lengthy and complex to quickly modify. The British Foreign Secretary Grey ignored these "technical" facts about the use of 11,000 trains in inflexible mobilization timetables, which led him to warn the Kaiser too late that Britain would go to war, making WWI inevitable.

Prime Minister Chamberlain's peace guarantee with Hitler signed at Munich on 30 September 1938 ([online facsimile linked here](#)) **misled Hitler yet again into believing that Britain was determined not to fight another war, thus giving Hitler the psychological freedom to do exactly as he wished.** When eventually, nearly a year later, Chamberlain did give Hitler an ultimatum to withdraw from Poland or face war, Germany had become so strong from the resources of the invaded territories and the totalitarian mass production of arms that it was a worthless threat that Hitler did not even bother responding to. (Even then, his bluff called, Chamberlain still didn't want to declare war and was only forced to do so by his Cabinet, which threatened to resign if he didn't declare war.)

Britain had to declare war on Germany, just as it had done in 1914. *The failure to honestly threaten the enemy at the earliest possible time did not reduce aggression and the risk of war, but encouraged and increased it.* If you believe in peace, don't encourage thugs by collaborating with their evil, or promising them peace, or trying to make friends with them by offering to collaborate with them: they just read that as a sign of your pathetic weakness and will walk all over you. This counter-intuitive fact (extensively documented in this blog post, below) is ignored by those who have a misguided understanding of human nature. The simplistic disarmament propaganda with its "weapons cause suffering"-hype ignores the fact that 75% of the few hundred thousand population of Hiroshima *survived* the nuclear bomb (particularly those who were not standing up in a direct line of sight to the explosion behind glass windows, and who did not duck and cover in the interval between the light flash and the delayed blast arriving and driving glass fragments into them) compared to the 0% survival rate in pesticide Zyklon B gas chambers, and the appalling death rates from starvation and disease in unheated concentration camps. How could disarmament ever prevent such cold blooded massacres? Hitler invaded Czechoslovakia without firing a shot, Hitler gassed millions using insecticide without firing a shot. Therefore, contrary to disarmament promises of a utopia without weapons in the 1930s, those people failed to acknowledge (and shamelessly still fail to acknowledge today) that it is not the bullet or the bomb which were the underlying problem of Hitler. *Anything, including pesticide, can be used as an efficient weapon against people who are pathetically defenseless.*

Hitler didn't declare war on Britain first in 1939. Despite promising Hitler peace at Munich in 1938, Chamberlain was eventually forced by his cabinet into declaring war on Germany. Admittedly, weakness from disarmament and soft talk *did reduce Britain's priority rating as a Nazi target*, but *this delay was of no help because it just gave the Nazis more time to prepare for war* (they were arming faster than Britain at all times before war was declared) and without American lend-lease and later military support, Britain would have been invaded and terrorized once the Nazis had finished their higher-priority invasions.

(2) Disarm so thugs won't kill you. This is a popular claim. In the 1920s and 1930s disarmament was falsely popularized on the basis of a lie by Lord Edward Grey, the British Foreign Minister who failed to intimidate Germany soon enough in 1914. Grey excused himself by fabricating the widely-repeated lie:

"The enormous growth of armaments in Europe, the sense of insecurity, and fear caused by them; it was these that made war inevitable." - Lord Edward Grey, quoted by John F. Kennedy, *Why England Slept*, 1940 thesis, reprinted by Greenwood, 1981, pp. 6-7

Actually, as Kennedy explained in his thesis on the cause of World War II, Grey's claim sowed the seeds for World War II, leading to a false belief in disarmament and diplomacy to overcome insecurity and fear by collaboration, written treaties, and public smiling hand-shaking with the most evil thugs in human history:



**Above: the finest hour of the appeasing peace maker: Prime Minister Chamberlain shakes the hand of Chancellor Hitler, after conceding the Sudetenland to the Nazis,** believing that by convincing Hitler that England would never resort to violence, Nazi aggression would be averted rather than encouraged. As we shall see, Chamberlain was not "buying time" by appeasement to rearm England at anything like the Nazi rate of rearmament, because he knew democratic England couldn't rival the munitions output of a totalitarian state, so England was losing the arms race, the gap was widening and the situation was ever getting worse for war as time was lost, not improving. This is contrary to Chamberlain's lying excuse later when accused in the **book *Guilty Men***, after his **peace efforts were proved to have actually encouraged aggression by convincingly misleading Hitler into believing that Britain would never fight back no matter how bad the Nazis were: see for instance the pathetic and glib text of Chamberlain's worthless "peace" paper which Hitler happily autographed for him on 30 September 1938, linked here.** Chamberlain *really was fooled by Hitler as we shall see further on in this post*, and the true fact is, **England's civil defence efforts to decrease vulnerability to air attack were so pathetic and poorly funded by Chamberlain's government that England didn't even test its air raid shelters against real explosives until mid-1939 (ref.: T. H. O'Brien, *Civil Defence*, H.M. Stationery Office, London, 1955, p.**

196, PDF linked here)

**“The 1930s taught us a clear lesson. Aggressive conduct, if allowed to grow unchecked and unchallenged, ultimately leads to war. This nation is opposed to war. We are also true to our word. Our unwavering objective, therefore, must be to prevent the use of these missiles against this or any other country and to secure their withdrawal or elimination from the Western Hemisphere.”**

- **President John F. Kennedy's television address to the nation, 22 October 1962 (6 days after the discovery of Soviet missiles in Cuba).** It should be clearly pointed out that pacifist propaganda during the Cold War claiming that Kennedy allowed the Soviet's to "save face" during the Cuban missiles crisis by removing obsolete American missiles from Turkey in exchange for the removal of new short and intermediate range missiles from Cuba, is a fraud. Removing obsolete missiles from Turkey doesn't compensate, and anyway it was not a public offer but a behind the scenes deal done *after* the public speeches by Kennedy which exposed that Andrei Gromyko had lied to Kennedy's face when denying that the Soviet's had placed missiles in Cuba. In particular, the excellent discussion of Kennedy's decision making process by Irving Janis in his book *Groupthink*, which contrasts the bad decision-making process ("**groupthink**") Kennedy used during the **1961 Bay of Pigs invasion** (when everyone around the table felt pressure to achieve unanimity, to suppress doubts, to censor contrary views, and to try to pacify and prematurely justify the plan to the group leader), with the very different, revised decision-making process Kennedy used during the Cuban missiles Crisis, when contrarian views were encouraged, leading to detailed investigations by war-gaming sessions for all possible eventualities, before any actions were taken.

**“If history teaches us anything, it is that we must resist aggression or it will destroy our freedoms. Appeasement does not work. As was the case in the 1930s, we see in Saddam Hussein an aggressive dictator threatening his neighbors. Only 14 days ago, Saddam Hussein promised his friends he would not invade Kuwait. And 4 days ago, he promised the world he would withdraw. And twice we have seen what his promises mean: His promises mean nothing.”**

- **President George H. W. Bush, 8 August 1990 (6 days after the Iraqi invasion of Kuwait).**

**“We fight for a free way of life against a new barbarism - an ideology whose followers have killed thousands on American soil, and seek to kill again on even a greater scale. ... Now, I know some people doubt the universal appeal of liberty, or worry that the Middle East isn't ready for it. Others believe that America's presence is destabilizing, and that if the United States would just leave a place like Iraq, those who kill our troops or target civilians would no longer threaten us. Today I'm going to address these arguments. I'm going to describe why helping the young democracies of the Middle East stand up to violent Islamic extremists is the only realistic path to a safer world for the American people. I'm going to try to provide some historical perspective to show there is a precedent for the hard and necessary work we're doing, and why I have such confidence in the fact we'll be successful. ...**

**“The enemy who attacked us despises freedom, and harbors resentment at the slights he believes America and Western nations have inflicted on his people. He fights to establish his rule over an entire region. And over time, he turns to a strategy of suicide attacks destined to create so much carnage that the American people will tire of the violence and give up the fight. ... The enemy I have just described is not al Qaeda, and the attack is not 9/11, and the empire is not the radical caliphate envisioned by Osama bin Laden. Instead, what I've described is the war machine of Imperial Japan in the 1940s, its surprise attack on Pearl Harbor, and its attempt to impose its empire throughout East Asia. ... even the most optimistic among you probably would not have foreseen that the Japanese would transform themselves into one of America's strongest and most steadfast allies, or that the South Koreans would recover from enemy invasion to raise up one of the world's most powerful economies, or that Asia would pull itself out of poverty and hopelessness as it embraced markets and freedom. ...**

**“The militarists of Japan and the communists in Korea and Vietnam were driven by a merciless vision for the proper ordering of humanity. They killed Americans because we stood in the way of their attempt to force their ideology on others. Today, the names and places have changed, but the fundamental character of the struggle has not changed. Like our enemies in the past, the terrorists who wage war in Iraq and Afghanistan and other places seek to spread a political vision of their own - a harsh plan for life that crushes freedom, tolerance, and dissent.**

**“Like our enemies in the past, they kill Americans because we stand in their way of imposing this ideology across a vital region of the world. This enemy is dangerous; this enemy is determined; and this enemy will be defeated.**

**“We're still in the early hours of the current ideological struggle, but we do know how the others ended - and that knowledge helps guide our efforts today. The ideals and interests that led America to help the Japanese turn defeat into democracy are the same that lead us to remain engaged in Afghanistan and Iraq. ...**

**“Critics also complained when America intervened to save South Korea from communist invasion. Then as now, the critics argued that the war was futile, that we should never have sent our troops in, or they argued that America's intervention was divisive here at home. ...**

**“Without Americans' intervention during the war and our willingness to stick with the South Koreans after the war, millions of South Koreans would now be living under a brutal and repressive regime. The Soviets and Chinese communists would have learned the lesson that aggression pays. The world would be facing a more dangerous situation. The world would be less peaceful. ...**

**“Finally, there's Vietnam. ... In 1955, long before the United States had entered the war, Graham Greene wrote a novel called, *The Quiet American*. It was set in Saigon, and the main character was a young government agent named Alden Pyle. He was a symbol of American purpose and patriotism - and dangerous naivete. Another character describes Alden this way: 'I never knew a man who had better motives for all the trouble he caused.'**

"After America entered the Vietnam War, the Graham Greene argument gathered some steam. As a matter of fact, many argued that if we pulled out there would be no consequences for the Vietnamese people.

"In 1972, one antiwar senator put it this way: 'What earthly difference does it make to nomadic tribes or uneducated subsistence farmers in Vietnam or Cambodia or Laos, whether they have a military dictator, a royal prince or a socialist commissar in some distant capital that they've never seen and may never have heard of?' [from Senator J. William Fulbright's *The Crippled Giant*, where Fulbright naively argues at great length that there is no difference between democracy and dictatorship for the very poor people, so fighting for their freedom is a waste of effort] ...

"The world would learn just how costly these miss-impressions would be. In Cambodia [where North Vietnamese troops had camps and supplies], the [communist] Khmer Rouge began [on 16 April 1975] a murderous rule in which hundreds of thousands of Cambodians died by starvation and torture and execution. In Vietnam, [communist North Vietnamese forces captured Saigon and claimed victory over South Vietnam on 30 April 1975, due to the withdrawal of American support, so] former allies of the United States and government workers and intellectuals and businessmen were sent off to prison camps, where tens of thousands perished. Hundreds of thousands more fled the country on rickety boats, many of them going to their graves in the South China Sea. ...

"There was another price to our withdrawal from Vietnam, and we can hear it in the words of the enemy we face in today's struggle - those who came to our soil and killed thousands of citizens on September the 11th, 2001. In an interview with a Pakistani newspaper after the 9/11 attacks, Osama bin Laden declared that 'the American people had risen against their government's war in Vietnam. And they must do the same today.' ...

"We must remember the words of the enemy. We must listen to what they say. Bin Laden has declared that 'the war [in Iraq] is for you or us to win. If we win it, it means your disgrace and defeat forever.' ...

"I recognize that history cannot predict the future with absolute certainty. I understand that. But history does remind us that there are lessons applicable to our time. And we can learn something from history."

- President George W. Bush, August 22, 2007 speech at the Veterans of Foreign Wars convention in Kansas City, Missouri.



**Above:** British Prime Minister Chamberlain and German Chancellor Hitler stand side by side in 1938. Chamberlain and the British public believed that Hitler could not really gain from his invasions, due to a false theory of Norman Angell, published in a bestseller before World War I. Angell claimed to logically disprove the "illusion" of war and of conquest. He falsely claimed that no conqueror could gain anything from war, because when it multiplies its territory to size  $x$  as a result of invasions, the increased cost of upkeep for the expanded territory divides out the total wealth by exactly the same factor,  $x$ , perfectly cancelling out the gains, so there is no net change, thus war is a "great illusion":

"For a modern nation to add to its territory no more adds to the wealth of the people of such nation than it would add to the wealth of Londoners if the City of London were to annex the county of Hertford." - Norman Angell, *The Great Illusion*, G. P. Putnam's Sons, New York, 1913, p. xi.

WWI was started by Germany which was left bankrupt afterwards, so Angell was believed, being **knighted in 1931** and awarded the **Nobel Peace Prize in 1933**. But Germany did not fail in WWI due to the paltry reason Angell predicted; when Germany was allowed to invade countries in the 1930s due to appeasement, it *did* profit, because it *simply carried away the wealth or set up slave labour factories and concentration camps to manufacture goods without remunerating the workers according to Angell's idealistic formula*. Angell and other appeasers ignored the possibility that an aggressor would exploit invaded countries.

Germany in WWI failed to win, not because Angell had proclaimed war a "great illusion" or because it gained nothing from invasions, *but simply because it overestimated its offensive gun shelling and related military power by reason of ignoring simple improvised countermeasures used effectively in the American Civil War*. These countermeasures were plain old trenches, nothing sophisticated, but they *cut down field casualty rates so much that the "knockout blow" expected from its arms stockpile was negated and failed to occur*. Recognising reluctantly that trenches efficiently protect people against blast winds and

the flying debris of explosions, Germany then came up with a weapon of so-called mass destruction called "poison gas" to overcome people in trenches. This was soon negated by the simple improvised countermeasure called the "gas mask". Such simple countermeasures as trenches and gas masks checked the offensive capability of Germany and stopped it from achieving a knockout blow. But this countermeasure fact was not the lesson widely learned from WWI and promoted to the public in the 1920s and 1930s.

Instead, Angell and others argued the other way (against the effectiveness of countermeasures) and invented the untested, speculative, utopian fantasy theory that, *if only weak, soft talk replaced tough threats and hard action, the dictatorial thugs in Germany, Italy and Japan would be somehow magically converted into loving, trustworthy and peaceful democrats, thus negotiating a way around the exaggerated effects of weapons on the cause of wars, by means of Nobel Peace Prize winning disarmament, turning a blind eye to racism, personal hand-shaking with thugs, and signing worthless agreements on paper with thugs in what is called "appeasement"*:

"The statement of Lord Grey, British Foreign Minister, made in 1914, that, 'The enormous growth of armaments in Europe, the sense of insecurity, and fear caused by them; it was these that made war inevitable,' had a tremendous effect on post-war British opinion. Armaments were looked upon as something horrible, as being the cause of war, not a means of defense. ... but England's failure to rearm has not prevented her from becoming engaged in a war; in fact, it may cost her one. The causes of war go deeper than armaments." - John F. Kennedy, *Why England Slept*, reprinted by Greenwood, 1981, pp. 6-7

We will return to President Kennedy's attack on Lord Grey later in this post. Exaggerating enemy offensive weapons is exactly the same thing as underestimating your own civil defence against the enemy. In response to the Berlin crisis and wall in 1961, Kennedy stepped up American civil defense, which gave him a stronger negotiating position in 1962, when Soviet Premier Khrushchev put missiles in Cuba.

#### The people who lied to try to make Britain vulnerable to thugs

**"Perhaps my factories will put an end to war sooner than your congresses: on the day that two army corps can mutually annihilate each other in a second, all civilised nations will surely recoil with horror and disband their troops."**

**- Alfred Nobel, to World Peace Conference campaigner Baroness Bertha von Suttner, August 1892.**

There is some doubt over Nobel's sincerity because **in his letter dated April fools day 1890 to Baroness von Suttner, referring to her anti-war novel *Lay down Your Arms*, he had cynically joked that he hoped to read it: "in case of universal peace"**. Nobel's prizes, including his peace prize, were after his death funded by the profits he made in selling dynamite to both sides in the Crimean War. The problem with his claim and also many of his peace prizes in the 1920s and 1930s is that they went to people who make war by lying about the destructiveness of high explosives and of gas. The idea is that if you lie to grossly misrepresent weapons effects and capabilities, and to dismiss all notion of countermeasures, then peaceful people will surrender their arms in fear and encourage your murder by the thugs who don't disarm or secretly rearm like the Nazis did, creating what Paul Mercer memorably called the "peace of the dead" (see **his excellent 465-pages long 1986 book mentioned in an earlier post, *'Peace' of the Dead: The Truth behind the Nuclear Disarmers*, Policy Research Publications, London**):

"... all gas experts are agreed that it would be impossible to devise means to protect the civil population from this form of attack."

- Lie about civil defence against gas warfare by Professor Noel-Baker in his February 1927 pro-disarmament, weapons effects exaggerating BBC broadcast, **quoted by Terence O'Brien, *Civil Defence*, H.M. Stationery Office, 1955, p. 31.**

O'Brien states that this lie produced resentment in secret meetings, but was never publically denounced, so Noel-Baker's lie was left to stand unopposed: "The Chemical Warfare Research Department emphatically disputed the accuracy both of the details of the picture and of this general statement." In fact, *everybody* in Britain was issued gas masks and advice on gas-proofing rooms in World War II, which helped to negate the threat of an attack, by making gas useless as a weapon! Despite this, Noel-Baker won a Nobel Peace Prize like Austin Chamberlain who negotiated with fascists in Italy to get peace treaties worth zip before World War II (these are discussed in detail later in this post), became a Lord, and **continued lying with exaggerations of weapons effects, such as in his lying speech during the House of Lords debate, 5 March 1980 Hansard, vol 406 cc260-386:**

Lord NOEL-BAKER:

"... I want to argue that no measure of civil defence, in any war which we can realistically expect to have, will save a single life, and that to nurse a hope of safety from civil defence is to indulge a self-deceiving, futile and dangerous illusion—self-deceiving and futile because, as I said, civil defence will not save our lives; dangerous because it diverts attention from the only policy that gives us any genuine hope. It makes the public think that there will be safety where no safety is. It obscures the fact that the only way to avert disaster is to avert the war, and to abolish those offensive weapons without which aggressions cannot be begun. ... Hiroshima, 6th August 1945, 8.15 a.m., a perfect summer day: gentle breezes, sunshine, a blue sky. A blue sky is for happiness in Japan. The streets are full of people: people going to work, people going to shop, people—smaller people—going to school. The air raid siren sounds but no one runs, no one goes to shelter. There is only a single aircraft in this enemy raid. The aircraft steers a course across the city. Above the centre, something falls. It falls and falls—20 seconds, 30 seconds, 40—and then there is a sudden searing flash of blinding light, hotter and brighter than a thousand suns. ... There are no ashes, even on the pavement—nothing but their black shadows on the stones. ... For two kilometres in all directions every building, every structure is levelled to the ground. The people inside are buried in the ruins of their homes. Lorries, vans, men and women, babies, prams, are picked up and hurled, like bullets, 100 metres through the air. ... Then the fireball touches the earth. Conflagrations spring up in every quarter. Swept by tornado winds, they rush together in a single firestorm. ... The fall-out comes down again. It covers everything in Hiroshima not already rendered lethal and so those who have escaped the flash, the river, the blast, the fire, will die within a shorter or a longer time. My Lords, the first atom



bomb weighed two kilogrammes—less than 5 lbs. It was a little larger than a cricket ball. It killed 140,000 people on that August day. In 1978 more than 2,000 died in Hiroshima of its long-delayed effects. ... Against such a danger civil defence offers us no help ..."

Lord Noel Baker's claim "the only way to avert disaster is to avert the war, and to abolish those offensive weapons without which aggressions cannot be begun" *falsely assumes that Hitler's aggression relied on his offensive weapons. Actually, Hitler invaded Czechoslovakia and most other annexed countries in the 1930s without firing a shot.* Additionally, most of the mass murder done by Hitler was not due to weapons of war like bombs or bullets, but by concentration camp disease, starvation, and the use of the pesticide Zyklon B for the cold-blooded extermination of millions of people in gas chambers. How will disarmament prevent people being gassed with pesticides or starved to death? It's complete and utter lunacy!

The same problem existed with Stalin's Soviet Union and Saddam Hussein's Iraq. The majority of the mass murder or "ethnic cleansing" was done in a cold blooded way, not by dropping bombs on the people. Noel Baker's disarmament propaganda conveniently just ignores all such facts. Actually, every single statement of Lord Noel Baker on nuclear weapons effects in Hiroshima is a complete and utter lie:

1. **The thermal fluence never vaporised anyone at ground zero and has never vaporized more than 1 mm of wood from such a weapon, regardless of distance;** while Oughterson and Warren's *Medical Effects of the Atomic Bomb in Japan* in 1956 proved that duck and cover prevented burns and the burns-radiation synergism which killed so many. Most of the casualties in both cities were due to blast and thermal radiation, with infected wounds made worse by the synergism of initial radiation exposure, which lowers the white blood cell count; **see the PDF linked here of James W. Brooks *et al.*, "The Influence of External Body Radiation on Mortality from Thermal Burns", *Annals of Surgery*, vol. 136 (1952), pp. 533–45.** (See also: G. H. Blair *et al.*, "Experimental Study of Effects of Radiation on Wound Healing", in D. Slome, Editor, *Wound Healing*, Pergamon, N.Y., 1961.)

2. All structures weren't levelled for 2 km; only obsolete wood-frame buildings no longer used in modern cities were damaged, displacing breakfast cooking stoves which caused thousands of fires that burned them down. Glasstone and Dolan, 1977, page 546, gives 50% survival in concrete buildings at 0.12 mile in Hiroshima. Such modern city buildings remained standing and afforded excellent protection.

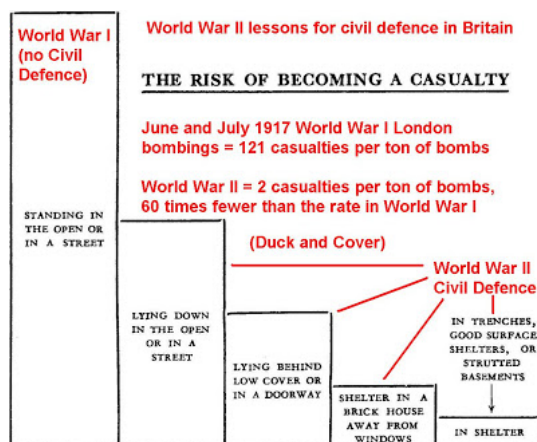
3. People blasted along could have avoided that (along with flash burns) by duck and cover, as the blast doesn't travel at the speed of light but is delayed after the flash. Ignorance of nuclear weapons effects proved lethal in Hiroshima; *it didn't disprove civil defence countermeasures!!*

4. **The fireball didn't touch the ground; fires were due to overturned cooking stoves in wooden homes filled with paper screens and bamboo furnishings. Modern city buildings are of non-flammable brick and concrete and steel construction.**

5. There was **no significant radioactive fallout (the cloud had been blown miles away before the sooty convective rainfall from the fires started more 20 minutes after detonation), there was just a trivial (in comparison to initial radiation) amount of fast-decaying neutron induced activity near ground zero, plus a trivial amount of cloud seeded activity downwind due to the entrainment of salt crystals and moist air before the firestorm had even begun (this is similar to the trivial rainout downwind from Pacific air bursts King in 1952 and Cherokee in 1956).**

6. **The percentage of deaths due to delayed effects has always been dwarfed by the natural cancer and natural genetic defect rates, see for instance *Radiation Research*, volume 146, 1996, pp. 1-27. In a controlled sample of 36,500 survivors, 89 people got leukemia over a 40 year period, above the natural leukemia number of 176 in the unexposed control group, due to the thermal instability of DNA which is naturally broken due to random molecular impacts from the Brownian motion of water molecules at body temperature, 37 °C. There were 4,687 other, "solid", tumour cancer deaths, which was 339 above the unexposed matched control group. Hence in the 36,500 Hiroshima survivors over 40 years there were 4,863 cancers of all kinds, which is 428 more than the unexposed control group. Hence, 12.2% naturally died from cancer over 40 years who weren't exposed to radiation, while for the irradiated bomb survivors the figure was 13.3%. No increase whatsoever in genetic malformations could be detected: any effect was so low it was lost in the statistical noise of natural genetic defects - the effect of body temperature on DNA again - for the sample size. Nature is a way, way, way bigger problem than radiation from nuclear bombs.**

7. The first nuclear weapon did not weigh 2 kg. The fissile core alone had a mass of 6.2 kg, and that was surrounded by tons of mass in the form of high explosive and other components.



Above: This diagram is from a British civil defence manual giving casualties in World War II. Terence H. O'Brien's brilliant 1955 history, *Civil Defence*, H.M. Stationery Office, London, 1955, p. 11 (online PDF linked here) makes the point that the British Government was grossly misled about casualty rates from bombs before World War II:

"The two heavy raids on London of June and July 1917, for example, together caused 832 casualties (216 fatal), which amounted to 121 casualties for each ton of bombs dropped; and these casualty figures were to have much significance for the planning authorities of the future."

This 121 casualties/ton was coupled with the guess that Hitler would drop 600 tons of bombs a day on England (O'Brien page 96), to predict up to  $121 \times 30 \times 600 = 2,200,000$  casualties/month. In addition, it was guessed that 25% of the bombs dropped by the Nazis would be lingering mustard gas liquid, causing immense contamination and skin burn problems, like radioactive fallout. Herman Kahn pointed out on pages 390-1 of his 1960 study of appeasement, *On Thermonuclear War*, that these falsehoods led to World War II, *because they frightened Prime Minister Chamberlain and most of the British media and public into repeatedly guaranteeing British pacifism, encouraging unimpeded aggression and thus increasing the risk of "accidental war" by misleading the Nazis into thinking that this country would be too scared of the predicted consequences to ever go to war, regardless of whatever the Nazis did.*

The 121 casualties/ton number depended upon a complete lack of warning and thus a complete lack of "duck and cover". In the World War II Blitz, as we shall see, Britain received 71,270 metric tons of high explosive (O'Brien, p. 680; this figure is just the high explosive payloads, not the entire mass of all missiles and bombs), of which 49% fell in the heavy Blitz period of 1940, 31% fell in 1941, 4% in 1942, and 3% fell in 1943. In all, the bombing of Britain killed 60,595 and seriously injured 86,182, giving 146,777 casualties in total (O'Brien, page 678).

Hence, World War II produced 2 casualties/ton of explosive, just 1.7% of the 121 casualties/ton of the 1917 bombing! Why were casualty rates reduced by a factor of 60 in World War II? **The diagram above explains the major reason why: it is from a British civil defence manual quoted in an earlier blog post, linked here (an addition factor is active defenses: World War II bombing proved less - not more - accurate than World War I bombing, owing to barrage balloons to prevent low level attacks, fighter defenses, anti-aircraft guns and missiles, etc.).** Duck and cover under strong tables, "Morrison shelters" saved the most lives in World War II, because the public were warned of air raids using the new invention of radar stations to detect impending bomber attacks. They had time to take cover, even if that was just lying down to reduce the body area exposed to air blast winds and flying debris. Before World War II, Prime Minister Chamberlain's government hampered all preparations apart from gas warfare research:

"It seems fair to say that a large part of the nation continued right up to the startling international events of 1938 to comfort themselves with the idea that the war which ended in 1918 had been 'a war to end war.' ... Owing to the slowness with which funds were made available for defence, technical experiments of various kinds, urgently needed to provide the planners with information, were long delayed. The formulation of policy regarding air raid shelters, for example, was seriously hampered by a lack of data which only up-to-date experiment could provide. ... Still suffering from the exhaustion, material and moral, of the 1914-18 ordeal the people were most reluctant to believe in the probability of another world-wide catastrophe. Planning for air raid precautions thus lacked the public support it might otherwise have received - until the catastrophe was imminent.

"It appeared in retrospect to one who had taken a leading official part for thirty years in defence preparations that 'our traditional policy of peace was carried this time to the verge of risk and beyond'. [Lord Hankey, *Government Control in War*, 1945, p. 82.]"

**- Terence H. O'Brien, *Civil Defence*, H.M. Stationery Office, London, 1955, p. 6. (O'Brien points out on page 196 that Anderson shelters were deployed in panic after Munich in 1938, without being properly tested against high explosive blast until mid-1939, and were only found to be liable to ground water flooding after being issued!)**

World War II was therefore the result of exactly the same weapons effects miscalculation that caused World War I. Germany started World War I as a short war in which its offensive capability would produce a decisive result quickly, by ignoring the efficiency of the trench in negating offensive high explosive shelling. It then tried to overcome the trench with gas, but was largely negated by the immediate invention of the improvised gas mask. Germany then developed skin blistering mustard gas, but by that time the allies had developed tanks. Hence, simple immediately improvised countermeasures - while not perfect - were able to reduce casualty rates sufficiently to convert the short duration planned war of overwhelming offensive firepower into a long duration war of attrition, in which there was time for the production of new armaments to come into play, negating the assumption Germany had made that only the stockpile of existing weapons would play a part (which would be true only in a short war).

There was never any need for miscalculations because the efficiency of trench sheltering against shelling had been amply demonstrated in the American Civil War, the lessons of which were ignored in Europe. O'Brien explains on page 12 that the false official predictions of World War II grew from seeds sown in the British Committee of Imperial Defence's November 1921 report, in which France was chosen as the hypothetical enemy for the next war:

"France's Air Force could drop an average weight of 1,500 tons of bombs on Britain each month by using only twenty bombing days in the month and only fifty percent of its aircraft. London, which would be an enemy's chief objective, could be bombed on the scale of about 150 tons in the first 24 hours, 110 tons in the second 24 hours, and 75 tons in each succeeding 24 hours for an indefinite period. It was to be anticipated that an enemy would put forth his maximum strength at the onset."

As a result, in December 1923 the U.K. Home Office set up an Air Raid Precautions sub-committee, which met first under the chairmanship of Sir John Anderson on 15 May 1924. So why were Anderson's shelters only first tested against high explosive blast in mid-1939, just before the war? What happened was that precise-sounding but wholly vacuous "predictions" of both the type and the effects of air attack were produced, with the effect that the committee concentrated to the exclusion of almost everything else upon the threat of gas, just like the threat of wind and weather dependent radioactive fallout is commonly exaggerated by doom-mongering exaggerations of nuclear war today.

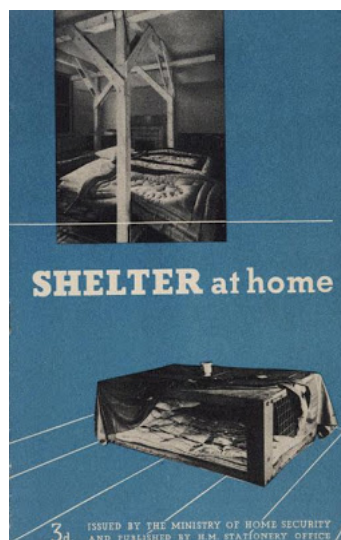
The horrific and wrong predictions of the scale of the attack (not to mention the assumed casualty rates) were conjured up by the Air Staff to get more funding to build up a force of bomber aircraft for retaliation, in the belief that this was the only means of defence. This is similar to the "missile gap" claims made after the Soviet launch of the first satellite, Sputnik, when it was misleadingly claimed in the **Top Secret Gaither Report of November 1957** that the **Soviet Union might have or soon have a massive missile superiority, allegedly in order to get better funding for American research.** (By analogy to the missile gap, on 24 September 2002,

Prime Minister Tony Blair repeated the tactic to argue for a war against Iraq by publishing *Iraq's Weapons of Mass Destruction: The Assessment of the British Government*, which contained statements that later turned out to be large exaggerations; Iraq had used nerve gas in the 1980s against the Kurds, and had later invaded Kuwait, provoking the first Gulf War, both of which would have justified toppling Saddam, without the need for spurious guesswork.) O'Brien explains on page 18:

"The Air Staff had given emphatic expression to the view that, whatever defence measures might be adopted, the determining factor in defeating air attack would be the strength of the counter-attack carried out by Britain's bombing aircraft against the enemy in his own country."



**Above:** conventional warfare is not a "soft option". No that's not Hiroshima. It's the so-called "soft option" of the appeasers. It's conventional warfare. It's Pyongyang, Korea, 1953, at the end of the war that killed 54,246 American soldiers and two million Koreans in the first large-scale combat against communism. **It led to troop training with nuclear weapon test explosions at the Nevada test site. The neutron bomb inventor, Samuel Cohen, reprints such photos beside those of Hiroshima in his book *The Truth About the Neutron Bomb*, as a comparison. His point is that neutron bombs can prevent such destruction; they cause less collateral damage than conventional weapons, since a 1 kt neutron bomb air burst at 500 m altitude produces no significant thermal, blast or fallout on the ground. But it does have the deterrence of initial 14.1 MeV neutron flash radiation to tanks, which can't be protected from such high energy neutrons. The short-term and long-term effects of burns and blast injuries from incendiaries and fragmentation bombs far outweigh any effects of nuclear radiation when the facts are examined objectively (Cohen debunks the once popular lie that a man who died after millions of rads to the fingers in a criticality experiment - actually *touching* a supercritical plutonium bomb core - illustrates nuclear weapon radiation injuries!).**



**Above:** the new Blitz-experience-based *Shelter at Home* handbook, published in June 1941, marked a shift of civil defence policy away from cold, damp, flooded outdoor shelters toward the more popular home Morrison protected bed shelter. **The British Government under Prime Minister Chamberlain had failed to properly fund civil defence research against high explosives in good time before World War II**, resulting in idealistic solutions which were not properly tested for practical effectiveness before being deployed in panic after the **September 1938 Munich crisis** (when Prime Minister Chamberlain was intimidated in his second meeting with Hitler). The panic civil defence countermeasures were outdoor trenches in public parks and the "Anderson" shelter, a corrugated steel arch buried in the ground and covered with earth.

Most of the Nazi bombing of Britain occurred during the Blitz (between 7 September 1940 and 10 May 1941), **when the U.K. Government's Shelter Census of central London in November 1940 found that 60% of the public were sleeping in their own homes during air raids, instead of getting up and dressed to go to a shelter upon the attack warning siren. Only 4% used the Underground system shelters, 9% used other public air raid shelters, and 27% used domestic Anderson shelters (Morrison indoor shelters were not even introduced until March 1941). The 60% who did not go out to any kind of shelter during air raids:**

**"stayed in their homes, sleeping downstairs, under stairs, under tables, in cupboards."**

**(For this census, see the "Home Shelters" tab at the internet site linked here, but beware that it falsely states that Morrison shelters were available, which was completely incorrect in November 1940.)**

"... distribution of 'Andersons' had begun before their testing had been completed. At the opening of 1939 'load tests' had shown that 'Andersons' were strong enough to bear the weight of any debris falling on them from the type of house for which they were intended. But it was not until some months later [Sectional Steel Shelters, Cmd. 6055, July 1939] that a series of 'explosion tests' proved conclusively [that they] could withstand without damage a 500 lb. [227 kg] high explosive bomb falling at least fifty feet away [equivalent to a 12 kt Hiroshima nuclear bomb some  $50(12,000/0.227)^{1/3} = 1,880$  feet away: thus, **Anderson shelters would have survived undamaged at ground zero after the air burst that high over Hiroshima**] ... It was established at the same time that they would protect their occupants against blast from a bomb of this size bursting in the open at a distance of thirty feet or more. But this soundness of the 'Andersons' from a structural standpoint, it soon became clear, was counterbalanced by an important practical defect, namely liability to flooding."

- Terence H. O'Brien, *Civil Defence*, H.M. Stationery Office, London, 1955, p. 196.

**There were very good reasons for the failure of 60% of the public to utilize outdoor shelters: Britain has a cool, wet climate with a high water table, so any below ground structure rapidly became damp and cold during the winter, and flooded by rain.** Before World War II it was believed that Nazi bombing would be in the daytime for reasons of accuracy, like World War I bombing. **In fact, the Blitz was nighttime bombing, when people were trying to sleep, because anti-aircraft guns and fighter aircraft found it much harder to shoot down bombers in the dark at nighttime, despite searchlights and early radar sets. London was bombed 57 consecutive nights.** Most people simply did not have time, upon hearing the air raid warning siren, to get dressed and go out to a **cold, damp or flooded public or back yard Anderson shelter, which in winter were often dark to allow some people to try to sleep and uncomfortable compared to a home bed** (London's underground rail communal shelters being an exception to the rule). Attempts to evacuate millions of women and children proved a failure, since most evacuees returned home after a few months of the outbreak of war, when the predicted air raids had still not occurred.

See Richard M. Titmuss, *Problems of Social Policy*, H.M. Stationery Office, London, 1950, [online HTML version linked here](#), and Terence H. O'Brien, *Civil Defence*, H.M. Stationery Office, London, 1955, [online PDF linked here](#). O'Brien at pp. 325-7 points out that the Government plan was to evacuate 4,000,000 women and kids before the outbreak of war in early September 1939, but unknown to the Government fewer than half of those decided to leave, and furthermore:

"By Christmas more than one-half of the 1,500,000 mothers and children concerned had returned home; in the London and Liverpool areas about two-thirds of the evacuated children had returned. (The first count taken in January 1940 disclosed that about 900,000 had returned.) ... this evacuation



scheme had, as **Mr Titmuss** says, 'largely failed to achieve its object of removing for the duration of the war most of the mothers and children in the target areas'."

Consequently, there was a shift based on these experiences away from the large failures of the "outdoor" shelter and evacuation policy, towards providing better protection within the home itself. **Sir John Fleetwood Baker** and his assistant Edward Leader-Williams at the Ministry of Home Security developed an **indoor shelter which could absorb the energy of the falling debris from the collapse of a normal house**. There is a really brilliant **scientific proof film (in the linked Cambridge University engineering faculty internet site, right click on the video link to choose to save the 7 MB mpg video file)** showing precisely the mechanism by which the Morrison shelter deflects slightly in order to absorb the kinetic energy of a falling house by plastic deformation; Baker simply puts his own pocket watch inside a tiny model Morrison shelter within a model house, and then slams down a 10 pound load to represent the debris of the collapsing house, and his watch remains safe!

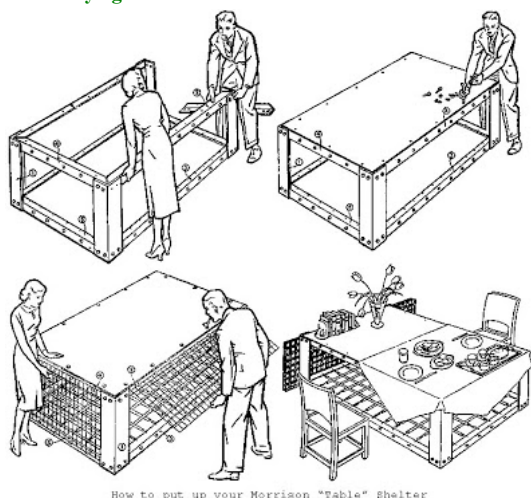
These Morrison table shelters were named after the Minister of Home Security (Herbert Morrison) and were introduced in March 1941. More than 500,000 were issued by November 1941, and they simply consisted of a strong dinner table containing a mattress for sleeping. They were 6' 6" long x 4' wide x 2' 9" high with a top consisting of 1/8" solid steel plate, with welded wire mesh sides and a metal lath floor. One wire side lifted up, allowing people to crawl inside the structure, where there was sleeping space for several people. These were placed in a ground floor (or basement) "refuge room", **a technique revived for blast, thermal flash and fallout radiation shielding by the U.K. Government in its 1980 civil defence manual against nuclear attack, *Protect and Survive***. Edward Leader-Williams, assistant to Morrison shelter designer Sir John Baker during the experiments, worked in the U.K. Home Office Scientific Advisory Branch until 1965, and in 1955 initiated the basic *Protect and Survive* "inner refuge" research against nuclear war.

**"In one examination of 44 severely damaged houses it was found that three people had been killed, 13 seriously injured, and 16 slightly injured out of a total of 136 people who had occupied Morrison shelters; thus 120 out of 136 escaped from severely bomb-damaged houses without serious injury. Furthermore it was discovered that the fatalities had occurred in a house which had suffered a direct hit, and some of the severely injured were in shelters sited incorrectly within the houses."** - Wikipedia

The 22 May 1940 booklet *Your Home as an Air Raid Shelter* had already marked a change in policy as the discomfort and flooding of outdoor Anderson shelters became clear. As a result of the experience gained during the Blitz bombing, it was revised and greatly improved in June 1941 to create the new handbook (featuring the indoor Morrison shelter), ***Shelter at Home***, which states:

"people have often been rescued from demolished houses because they had taken shelter under an ordinary table ... strong enough to bear the weight of the falling bedroom floor."

The discovery of this table "duck and cover" effectiveness in air raids led to a revolutionary shelter design; the indoor Morrison table shelter of 1941. (For publication dates of these booklets, see T. H. O'Brien, *Civil Defence*, H.M. Stationery Office, 1955, pages 371 and 529.) **It is the forerunner to the "inner core refuge" adopted for protection against thermal flash, blasted flying debris and fallout radiation in a nuclear war in the 1980 booklet *Protect and Survive*.**



How to put up your Morrison "Table" Shelter



Morrison shelters prevented any casualties in the seriously damaged house on the right. U.K. Government report, 1941.

**Morrison Shelters in Recent Air Raids.**

A report of Ministry of Home Security experts on 39 cases of bombing incidents in different parts of Britain covering all those for which full particulars are available in which Morrison shelters were involved shows how well they have stood up to severe tests of heavy bombing.

All the incidents were serious. Many of the incidents involved direct hits on the houses concerned a risk against which it was never claimed these shelters would afford protection. In all of them the houses in which shelters were placed were within the radius of damage by bombs; in 24 there was complete demolition of the house on the shelter.

A hundred and nineteen people were sheltering in these 'Morrison's' and only four were killed. So that 115 out of 119 people were saved. Of these only 7 were seriously injured and 14 slightly injured while 94 escaped uninjured. The majority were able to leave their shelters unaided.

**Above:** the facts about the life-saving ability of the Morrison table shelter during aerial bombing in World War II Britain: it protects against the collapse of buildings regardless of whether that collapse is caused by TNT, a hurricane, an earthquake, or a nuclear bomb. **A U.K. Government press release from November 1941, *Morrison Shelters in Recent Air Raids*, states:**

**"A report of Ministry of Home Security experts on 39 cases of bombing incidents in different parts of Britain covering all those for which full particulars are available in which Morrison shelters were involved shows how well they have stood up to severe tests of heavy bombing.**

**"All the incidents were serious. Many of the incidents involved direct hits on the houses concerned, a risk against which it was never claimed these shelters would afford protection. In all of them the houses in which shelters were placed were within the radius of damage by bombs; in 24 there was complete demolition of the house on the shelter.**

**"A hundred and nineteen people were sheltering in these 'Morrison's' and only four were killed. So that 115 out of 119 people were saved. Of these only 7 were seriously injured and 14 slightly injured while 94 escaped uninjured. The majority were able to leave their shelters unaided."**

**The top set of instructions for building the Morrison shelter and using it as a table between air-raids are taken from the instruction manual for building the Morrison shelter, *How to put up your Morrison "Table" Shelter*, issued by the Ministry of Home Security, H.M. Stationery Office, March 1941 (National Archives document reference HO 186/580), which states:**

**"The walls of most houses give good shelter from blast and splinters from a bomb falling nearby. The bomb, however, may also bring down part of the house, and additional protection from the fall of walls, floors and ceilings is therefore very essential. This is what the indoor shelter has been designed to give. Where to put it up, which floor? Ground floor if you have no basement. Basement, if you have one. ... Protect windows of the shelter room with fabric netting or cellulose film stuck to the glass (as recommended in *Your Home as an Air Raid Shelter*). The sides of your table shelter will not keep out small glass splinters."**

**According to the article, "Air Raid Precautions" in *Nature*, vol. 146, p. 125, 27 July 1940, "more than 700,000 copies" of *Your Home as an Air Raid Shelter*, were sold by the end of July 1940.**

### ***Your Home as an Air Raid Shelter***



**Above:** The U.K. Government film, *Your Home as an Air-Raid Shelter* was issued in 1940 to accompany a manual of the same title, giving improved information based on bombing experience.

"The public outcry about conditions in the largest public shelters, often without sanitation or even lighting, and the appalling inadequacy of the over-loaded and ill-equipped rest centres for the bombed-out led to immediate improvements, but cost Sir John Anderson his job. ... His successor as Home Secretary, Herbert Morrison ...

"The growing reluctance of many people to go out of doors led the new Home Secretary to look again at the need for an indoor shelter... The result was the Morrison shelter, which resembled a large steel table ... During the day it could be used as a table and at night it could, with a slight squeeze, accommodate two adults and two small children, lying down. The first were delivered in March 1941 and by the end of the war about 1,100,000 were in use, including a few two-tier models for larger families. Morrisons were supplied free to people earning up to £350 a year and were on sale at about £7 to people earning more. ... the Morrison proved the most successful shelter of the war, particularly during the 'hit and run' and flying-bomb raids when a family had only a few seconds to get under cover. It was also a good deal easier to erect than an Anderson, and while most people remember their nights in the Anderson with horror, memories of the Morrison shelter are usually good-humoured.

"... A government leaflet, *Shelter at Home*, pointed out that 'people have often been rescued from demolished houses because they had taken shelter under an ordinary table... strong enough to bear the weight of the falling bedroom floor'. I frequently worked beneath the solid oak tables in the school library during 'imminent danger periods' and, particularly before the arrival of the Morrison, families became accomplished at squeezing beneath the dining table during interrupted meals. ... Although the casualties were mercifully far fewer than expected, the damage to property was far greater. From September 1940 to May 1941 in London alone 1,150,000 houses were damaged ..."

- Norman Longmate, *How we Lived Then - A history of everyday life during the Second World War*, Pimlico, 1971.

**Above:** in the major British Cold War civil defence drive of 1981, the **British Home Office shamelessly promoted the tried and tested World War II Morrison shelter as the "Type 2"** in its 1981 manual, *Domestic Nuclear Shelters*, and included the World War II Anderson shelter which the Home Office had successfully tested at the first British nuclear weapon test, *Hurricane* in 1952 at Monte Bello (see U.K. National Archives document reference DEFE 16/933), as the "Type 3". Their "Type 1" was simply Cresson H. Kearny's earth and door covered trench shelter from the U.S. Oak Ridge National Laboratory reports on blast tests of the shelters, plus his *Expedient Shelter Handbook* and his *Nuclear War Survival Skills*, which in turn were based on American blast and fallout radiation shielding tests of the Soviet Union civil defense manual shelters. In part, therefore, Britain's ability to credibly site cruise missiles and neutron weapons in the 1980s against the Soviet expansionism and massive SS-20 threat, was derived from translations and tests of research published in Russian in the Brezhnev era Soviet civil defense manual! **Kearny in 1987 improved the improvised fallout radiation "core shelters" by developing the method of stacking water-filled plastic bag lined boxes on a table to provide shielding where earth or sand was not available.**

**For data on tests of successful improvised shelters against chemical weapons, see the 2001 Oak Ridge National Laboratory report, ORNL/TM-**

**2001/154, linked here;** similar chemical warfare protective actions to those described and defended empirically in this report were to be included in a revised edition of *Protect and Survive* in the late 1980s which was never published after the Cold War ended. **Note that the idea of sealing up an inner refuge room with duct tape against poison gas - based on 1930s Porton Down experiments - dates right back to the 1938 British Government civil defence handbook distributed to all 14,000,000 households after the Munich crisis in September 1938, *The Protection of Your Home Against Air-Raids*.**



**Above:** London's deep underground rail (tube) station shelters were not always safer than "duck and cover" sheltering at home. The tube station shelter at Balham was flooded, drowning 68 people on 14 October 1940, by a Nazi bomb which blasted a crater in Balham High Road, rupturing the water mains. A bus crashed into the crater (photos above; *notice the that the brick buildings beside the massive crater have had the nearby walls knocked down, but the floors have not collapsed*), and the water leaked into tube shelter that was 9 metres below. The underground railway line was repaired quickly and reopened in January 1941. An even bigger disaster was caused on 3 March 1943 by a poorly designed shelter entrance at Bethnal Green tube station, when the noisy firing of anti-aircraft rockets from the nearby Victoria Park caused a crowd to surge down the darkened entrance staircase. A woman carrying a bundle and a baby fell over when reaching the bottom, causing a pile up in the narrow stairwell, which killed 173 people by suffocation. The shelter entrance was immediately redesigned, with better entrance lighting, hand rails and crush barriers added outside all deep shelters to prevent an excessive crowd pressure from occurring. (These changes are described in

**Terence H. O'Brien's *Civil Defence*, H.M. Stationery Office, London, 1955, pages 544-5.)**

**Robert Scheer**  
**WITH ENOUGH SHOVELS: Reagan, Bush & Nuclear War**

"Dig a hole, cover it with a couple of doors and then throw three feet of dirt on top... It's the dirt that does it... if there are enough shovels to go around, everybody's going to make it."

—Y. H. Jones, Deputy Under Secretary of Defense for Strategic and Theater Nuclear Forces

President Ronald Reagan has been in office less than a year when he proposed a secret plan for the United States to prevail in a protracted nuclear war. This secret plan, outlined in a so-called National Security Decision Document, remained the Defense Department for the first time in the time that a global nuclear war was in view.

With these words, Robert Scheer, the distinguished journalist and author of the *Los Angeles Times*, begins the extraordinary chronicle of how a handful of Cold War ideologues—led by the President himself—have reversed the long-standing American assumption that nuclear war meant mutual annihilation. What Scheer shows is how Ronald Reagan's administration has been able to win a nuclear war—in fact, a protracted nuclear war with more nuclear exchanges—and how they expect that such such a war is won. The United States will return to normal. The belief on which this strategy rests is that we can win a pro-war and not a post-war world, according to Robert Scheer, the most famous journalist in the United States. Scheer's book is a brilliant and powerful work of journalism. It is a book that should be read by every American citizen.

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American President Reagan and **British Prime Minister Thatcher**, contrary to Foot's appealing Labour Party (which adopted a policy of unilateral nuclear disarmament to appease the USSR at the 1983 election), in the early 1980s were developing a Western psychological strength to oppose Soviet nuclear and expansionist intimidation through the promotion of *Protect and Survive* and *Nuclear War Survival Skills* as a reply to the Soviet civil defense preparations, backed up with cruise missiles and neutron bombs to combat the Soviet threat of SS-20 missiles and massive numbers of Soviet/Warsaw Pact tanks, and later an ABM project called SDI or Star Wars, to reduce the number of incoming warheads. Journalist Robert Scheer interviewed Reagan and his key personnel, concluding in 1982:

"The ultimate political aim of these **nuclear hawks is to intimidate, disrupt and eventually transform the Soviet Union by the threat of nuclear war**. What this strategy greatly underestimates is the very real likelihood that it will lead to a very real catastrophe, or as Desmond Ball realistically fears,



a confrontation in which our only choices are war or capitulation."

- Robert Scheer, *With Enough Shovels: Reagan, Bush and Nuclear War*, Secker and Warburg, London, 1983, page 122.

The publisher's dust wrapper quotes Reagan's Deputy Under Secretary of Defense for Strategic and Theatre Nuclear Forces, T. K. Jones, explaining how ordinary dirt can shield gamma radiation from fallout, and states that Reagan's appointed head of the U.S. Arms Control and Disarmament Agency, Eugene Rostow, stated that the political situation was then "a pre-war and not a post-war world". The blurb explains this: "According to this view, the Soviets, like Hitler, are bent on world conquest. Therefore the United States must meet this challenge with the determination to shrink the Soviet empire and fundamentally alter Soviet society."

Scheer ignored the continuing risk of nuclear war if the Soviet Union was *not* crippled by the arms race and reformed by the strength of Western resolve. Reagan and Bush wanted to *end* the threat of nuclear war, negotiating from a position of strength, not weakness. A world in which the Soviet Union never reformed, and existed forever, would have had an eternal risk. Having an operation to save your life from a fatal condition carries a risk itself; in other words, Scheer was blind to the relative risks, to the facts. Notice that other writers at that time were more realistic. A former Intelligence Officer of the British Army, **Donald James**, prophetically wrote *The Fall of the Russian Empire*, June 1982, the prologue of which refers to "the great events of the 1980s which finally swept away the Soviet Union." He predicts the "death of Leonid Brezhnev after so long an illness" (Brezhnev died in November 1982) and correctly guessed the final leader of the Soviet Union would have the name Mikhail.

Now let's consider the research of Scheer's *With Enough Shovels* in detail. **Robert Scheer (born 1936)** was a political journalist for the *Los Angeles Times*. Before becoming President, Ronald Reagan spent many hours arguing about civil defense and the Soviet threat with Scheer, and first appears on page xiv of the book:

"Let me also acknowledge my indebtedness to Ronald Reagan ... Reagan is a man of strong convictions and a sense of humor, confident that his ideas can withstand challenge. At the beginning of one of our grueling sessions he leaned over to me and said in a stage whisper, 'You know we'll have to stop meeting like this'."

Scheer's states on page 3 (the first page of chapter one):

"This book is about how our leaders during the time of Ronald Reagan have come to plan for waging and winning a nuclear war with the Soviet Union, and how they are obsessed with a strategy of confrontation - including nuclear brinkmanship - which aims to force the Soviets to shrink their empire and fundamentally alter their society."

Reagan's head of FEMA (Federal Emergency Management Agency) was **Louis O. Giuffrida** who told ABC news (Quoted by Scheer, page 3):

"Nuke war ... would be a terrible mess, but it wouldn't be unmanageable."

Reagan's head of ACDA (U.S. Arms Control and Disarmament Agency), **Eugene V. Rostow (1913-2002)**, the highest ranking Democrat in Republican Reagan's Administration, had written a letter to **Frank R. Barnett** (published in an article by Robert Sherrill in *The Nation*, 11-18 August 1979, and quoted by Scheer, pages 5 and 129) stating:

"I fully agree, as you know, with your estimate that we are living a pre-war and not a post-war world, and that our posture today is comparable to that of Britain, France, and the United States during the Thirties. Whether we are at the Rhineland or the Munich watershed remains to be seen ..."

Reagan's executive director for ACDA's General Advisory Board, Charles Kupperman, a former defense analyst for the Committee on the Present Danger, told Scheer in 1981:

"... I think the images Americans have been brought up with on nuclear war are not accurate, and it is certainly a more popular argument to say there's no survivors, no way you can win a nuclear war, that it is too horrible to think about. That appeals to human emotions ... I think it is possible for any society to survive, and I would think that a democratic society would want to survive. ... I think it is possible to win, in the classical sense. ... It means that it is clear after the war that one side is stronger than the other side, the weaker side is going to accede to the demands of the stronger side." (Quoted by Scheer, pp. 130-1.)

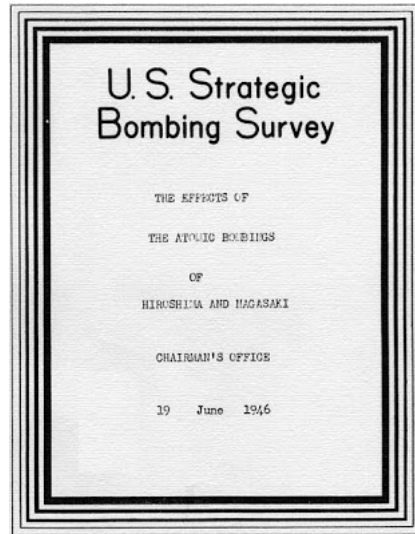
"... the thing is, nuclear weapons have certain effects and if you take steps to deny those effects, you save a lot of people. And unless you are right in the middle of ground zero, you are not going to have a lot of burn victims if you take those steps. ... Hiroshima, after it was bombed, was back and operating three days later." (Quoted by Scheer, pp. 184-5.)

Reagan's friend and adviser, Laurence W. Beilenson, author of *The Treaty Trap and Power through Subversion*, told Scheer (pages 101 and 111):

"There had been diplomacy as long as there has been war ... diplomacy and treaties have coexisted happily with war all through the ages. If they could prevent war, why haven't they?"

"... we killed more people when we bombed Tokyo with conventional weapons than we did at Hiroshima and Nagasaki. We also destroyed more houses and made more people homeless than we ever did with nuclear weapons."

The diplomatic effects of nuclear weapons on war are complex and are discussed in the U. S. Strategic Bombing Survey, *The Effects of the Atomic Bombs on Hiroshima and Nagasaki*, 19 June 1946. Even two nuclear weapons on Japan did not, directly, lead to surrender. It is true that the Japanese declaration of war against Japan was as effective or more effective on the leadership of Japan than the direct news of Hiroshima and Nagasaki. However, without Hiroshima, Stalin would not have declared war against Japan so soon, and the war could have continued for much longer, costing millions of lives. Therefore, the nuclear weapons had an important indirect political effect in promptly ending the war, by means of pushing Stalin into finally declaring war on Japan, instead of stalling for longer while many thousands died from the fighting every single day. Stalin only finally declared war on Japan because his spies had told him that America was producing nuclear weapons to end the war soon, so Stalin was forced to act fast when he received news of Hiroshima, in order to qualify as a winning ally on the Far Eastern front. It was this indirect effect of the use of nuclear weapons (the pressure on Stalin to quickly declare war on Japan) which ended Japan's hopes, leading to surrender:



Page 28: On 26 June 1945 there was a meeting of the Supreme War Guidance Council of Japan in the presence of the Emperor: "At this meeting, the Emperor, taking an active part despite his custom to the contrary, stated that he desired the development of a plan to end the war as well as one to defend the home islands. This was followed by a renewal of earlier efforts to get the Soviet Union to intercede with the United States, which were effectively answered by the [Soviet-American joint] Potsdam Declaration on 25 July and the Russian declaration of war [against Japan] on 9 August. The atomic bombings considerably speeded up these political manoeuvrings within the government. This in itself was partly a morale effect, since there is ample evidence that members of the Cabinet were worried by the prospect of further atomic bombings, especially on the remains of Tokyo. The bombs did not convince the military that defense of the home islands was impossible, if their behavior in government councils is adequate testimony. It did permit the Government to say, however, that no army without the weapon could possibly resist an enemy who had it, thus saving 'face' for the Army leaders [for taking the Potsdam surrender terms]."

Beilenson also co-authored an article called "A New Nuclear Strategy" with **neutron bomb inventor Samuel T. Cohen** in the 24 January 1982 *New York Times*, which stated (quoted by Scheer, p. 180):

"The fruit of diplomacy is a treaty, and all nations, including our own, have habitually broken treaties. The champion treaty breaker, the Soviet Union, believes that violating compacts for the sake of advantage is a virtue."

Reagan's Federal Emergency Management Agency (FEMA) civil defense division chief William Chipman told Scheer in 1981 (p. 111):

"... it's still an explosion, and just as if a shell went off down the road, you'd rather be lying down than standing up, and you'd rather be in a foxhole than lying down. It's the same thing."

Chipman had on 19 June 1980 told the Subcommittee on Health and Human Research (quoted in Scheer's book):

"Senator, we have done, through the last decade or so, a great deal of post-attack research. People have looked at radiological problems, economic problems, psychological problems, problems of disease control and public health in the year or so following an attack. And in all these years of research, no factor had been found which would preclude recovery. ..."

"Someone mentioned the **Black Death, and I was impressed a few weeks ago in reading about that during the period of the Hundred Years' War**. Here was a catastrophe that killed a third of the population of England. And yet these people were able to mount an expeditionary force to France and fight the Battle of Poitiers six or eight years after the epidemic. I do not know what this says about the ethics of the human race, but it shows there is a certain resilience and toughness to society."

Reagan's Deputy Under Secretary of Defense for Research and Engineering was Thomas K. Jones, who had served as a consultant for Nixon's SALT I treaty negotiating team in 1973, before studying the effectiveness of the Soviet civil defense programme by actually using high explosive **experiments at Boeing in 1974**. Jones testified on 17 November 1976 before the hearings of the Joint Committee on Defense Production (Scheer p. 139):

"... my original view, and the view I held during the time I was on the SALT delegation, was that there was no defense against nuclear war and that there was no realistic recovery from it. It was not until we started looking at what the Soviets were doing, and then went back and tried to correlate this with the recovery of Europe in World War II, the recovery of the Japanese cities - Hiroshima and Nagasaki - for example, that we began to realize that recovery is feasible. ...

"For example, American impressions, which formerly included my own beliefs, are that Hiroshima was put out of business for a very long time. **It turns out, however, that the day after the blast, bridges in downtown Hiroshima were open to traffic. Two days later, the trains started to run again, and three days later, some of the streetcar lines were back in operation.**

"**The U.S. survey team came into the area two months after the bomb, and the surviving residents were back on their original homesites, starting to erect shelter out of whatever materials they could find.** It is also very relevant to note, sir, that the U.S. team that surveyed Japanese cities prepared a list of very detailed recommendations as to how you should posture society to survive a nuclear war, and that all of those recommendations are contained in the Soviet civil defense documents, with improvements of their own added."

Jones obtained the originally secret, detailed U.S. Strategic Bombing Survey reports from **Paul Nitze (1907-2004)** who had been the vice-chairman of the Strategic Bombing Survey (Nitze had personally been in Japan surveying the damage), and who was Jones' boss on the SALT treaty delegations in 1973. Jones told Scheer in 1981 (Scheer, pp. 21-3):

"**Dig a hole, cover it with a couple of doors and then throw three feet of dirt on top. ... Turns out, with the Russian approach, if there are enough shovels to go around, everybody's going to make it.**"

**Cresson Kearny's Oak Ridge National Laboratory *Nuclear War Survival Skills*, ADA328301 (1979), which contains all the evidence for the civil defence T. K. Jones was discussing. Kearny's blast and fallout shielding evidence was completely ignored by Scheer. Scheer was engaged in a political diatribe. I think that part of the reason why civil defense was being taken less seriously at that time was that the excellent civil defense chapter in Glasstone and Dolan's *Effects of Nuclear Weapons* 1964 was completely removed from the 1977 edition which was published during Carter's administration, which also tried to appease the Soviet Union by delaying the deployment of the neutron bomb.**

Reagan himself explained such a winnable nuclear war scenario to a group of newspaper editors on 16 October 1981:

"I could see where you could have the exchange of tactical [nuclear counterforce] weapons against troops in the field without it bringing either one of the major powers to pushing the [nuclear countervalue] button." (Scheer, p. 131.)

In 1957, **Henry Kissinger**, in his book *Nuclear Weapons and Foreign Policy* (Harper, New York, 1957, pp. 180-3, 228-9) explained how counterforce (tactical nuclear war) could be kept limited without escalating to a countervalue use of second-strike strategic weapons:

"With proper tactics, nuclear war need not be as destructive as it appears when we think of [Hiroshima and Nagasaki]. The high casualty estimates for nuclear war are based on the assumption that the most suitable targets are those of conventional warfare: cities to interdict communications ... With cities no longer serving as key elements in the communications system of the military forces, the risks of initiating city bombing may outweigh the gains which can be achieved. ...

"The elimination of area targets will place an upper limit on the size of weapons it will be profitable to use. **Since fall-out becomes a serious problem only in the range of explosive power of 500 kilotons and above, it could be proposed that no weapon larger than 500 kilotons will be employed unless the enemy uses it first.** [The average warhead yield of both America and Russia is today well below 500 kilotons - thanks for MIRV technology - so the fallout is no longer on the *Bravo* test scale of 1954.] Concurrently, the United States could take advantage of a **new development which significantly reduces fall-out by eliminating the last stage of the fission-fusion-fission process.**"

William L. Laurence, a *New York Times* Science Correspondent recruited by the Manhattan Project to document nuclear explosions, observed the nuclear bombing of Nagasaki from the observation B-29 bomber, as well as the 1946 nuclear tests at Bikini Atoll, and in 1951 explained why the threat of tactical nuclear war was

needed in *The Hell Bomb* (Hollis and Carter, London, 1951, pp. 72-87):

"... our giving up the right to use the H-bomb as a tactical weapon against [Soviet] armies would leave her free to march into the countries of western Europe. It would then be too late to stop her, for we could not drop the H-bomb on the cities of western Europe. The only time to stop Russia's armies is before they cross into the territory of our allies, during the crucial period when they are mobilized in large numbers and on the march.

"The American people, and the other free peoples of the world, could not agree to such a scheme to disarm them in advance and thus give the masters of the Kremlin a free hand. To do so would not prevent war, it would encourage it. Instead of being preventable, it would become inevitable. We wouldn't even save our cities from the fate of strategic bombing with A- and H-bombs, since the Kremlin has never kept its promises when they did not suit its purposes. ...

"These are the brutal facts that would confront us were we to renounce the right to use A- and H-bombs as tactical weapons against armies in the field [lacking the concrete buildings of modern cities for protection]. As long as we retain that right, the chances are good that we could prevent global war, for no nation would be likely to risk such a war in the face of the possibility that the main bulk of its armies might be wiped out at the outset. ...

"... Our justification for building the hydrogen bomb is thus not merely to prevent its use, but to prevent World War III, and to win it if it comes."

Reagan's Secretary of Defense, Caspar W. Weinberger, is quoted from the 23 August 1982 "Washington Talk" column of *The New York Times* in Scheer's prelims, as stating:

"I worry that we will not have enough time to get strong enough to prevent nuclear war. I think of World War II and how long it took to prepare for it, to convince people that rearmament for war was needed. I fear we will not be ready. I think time is running out ... but I have faith."

Defense Secretary Weinberger had earlier stated at the Congressional Hearings before the Committee on the Budget, House of Representatives, 10 September to 1 October 1981:

"... our top priority is on doing whatever is necessary to ensure nuclear force parity, across the full range of plausible nuclear war fighting scenarios, with the Soviet Union. ... we will work steadily on expanding our capabilities for deterring or prosecuting a global war with the Soviet Union, a war that could be lengthy or be preceded by a prolonged mobilization buildup, rather than confining our planning to address only short wars in selected theatres. This ultimately will lead to larger force requirements ..." (Scheer, p. 129.)

Reagan's Deputy Defense Secretary Frank Carlucci had on 13 January 1981 stated to the U.S. Senate's Committee on Armed Services:

"I think we need to have a counterforce capability. Over and above that, I think we need to have a war fighting capability. I think the Soviets are developing a nuclear war fighting capability, and we are going to have to do the same. That is a very large order." (Scheer, p. 129.)

Reagan's Energy Secretary, James B. Edwards, stated: "I want to come out of it number one, not number two." (Scheer, p. 6.)

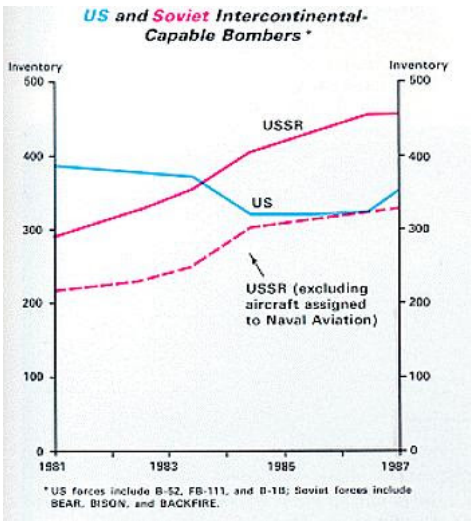
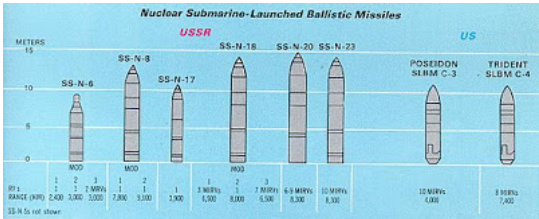
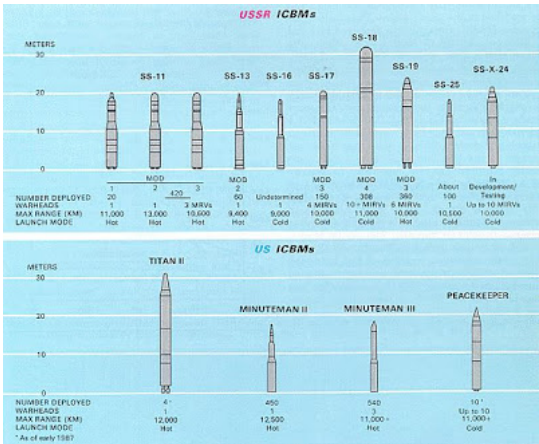
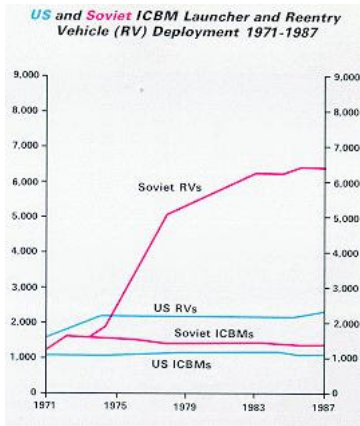
Reagan's senior Soviet specialist on the National Security Council staff was former Harvard historian Richard Pipes, who had criticized President Carter's nuclear strategy in a speech published on 6 November 1978 in *Aviation Week and Space Technology*: "deeply imbedded in all our plans is the notion of punishing the aggressor rather than defeating him." **Pipes published an article called "Soviet Global Strategy" in the April 1980 issue of *Commentary***, arguing:

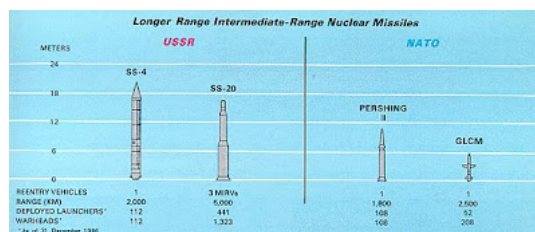
"The ultimate purpose of Western counterstrategy should be to compel the Soviet Union to turn inward - from conquest to reform. Only by blunting its external drive can the Soviet regime be made to confront its citizenry and to give an account of its policies. It is a well-known fact of modern Russian history that whenever Russian governments suffered serious setbacks abroad - in the Crimean war, in the 1904-5 war with Japan, and in World War I - they were compelled by internal pressure to grant the citizenry political rights. We should help the population of the Soviet Union bring its government under control. A more democratic Russia would be less expansionist and certainly easier to live with." (Quoted by Scheer, p. 131.)

Reagan acted:

"A senior White House official said Reagan approved an eight-page national security document that 'undertakes a campaign aimed at internal reform in the Soviet Union and shrinkage of the Soviet empire'." - Helen Thomas, White House correspondent for United Press International, 21 May 1982. (Quoted by Robert Scheer, *With Enough Shovels*, Secker and Warburg, London, 1983, p. 7.)







**Above:** These graphs are from the 1987 edition of the Pentagon's book, *Soviet Military Power*. **U.S. Secretary of Defense Caspar Weinberger from September 1981 was forced to declassify a summary of previously secret Pentagon intelligence on the Soviet Union's increasing threat, publishing it as the annual book *Soviet Military Power*. This was done in order to overcome anti-nuclear and anti-civil defense propaganda, and the figures were defended against "critics" in research reports like ADA227470.** *Soviet Military Power* clarified the immense dangers from new generations of Soviet weaponry (like the immense SS-18 missiles deployed while America remained static at 1,000 Minutemen and 54 Titan II ICBMs), which permitted President Reagan to justify taking countermeasures to negate and reform the Soviet Union's aggressive militarism, by forcing it to the arms negotiating position *from a position of strength, not appeasing weakness*. This is precisely what British Prime Minister Chamberlain should have done to reform the Nazis from their policy of racism and expansionism in the 1930s, although the weapons effects exaggerations were severe in both the 1930s and 1980s. However, as Herman Kahn pointed out, Hitler seemed willing to actually go to war in the 1930s, simply because he believed Goering's lies of the power of air bombardment to win a war. In order to nullify the Nazi threat it would have been necessary to demonstrate the efficiency of civil defense countermeasures against bombing and the efficiency of air defense against bombers, as well as developing efficient anti-tank rockets. Chamberlain was misled on both counts. In addition, Chamberlain persisted in ignoring and downplaying warnings of Nazi racism against the Jews. From 1933 Nazi racism was obvious and from 1936, news of concentration camp construction in Germany was being reported in the British press, but despite this Chamberlain persisted in flying to Germany repeatedly to shake hands with Hitler.

Concentration camps and eugenics were both British inventions adopted by the Nazis. Britain's Kitchener used concentration camps in the Boer War (1899-1902) in the deportation of 154,000 women and children from burned down Boer homesteads, as part of his scorched-earth policy. The conditions were bad, and 26,000 died. Eugenics was developed in 1883 by Sir Francis Galton, the cousin of evolutionist Charles Darwin. Our point is that Prime Minister Chamberlain's tolerance towards Hitler (until war finally broken out, when he developed a more sensible view of Hitler and also tried to cover up the lies of appeasement as "buying time" despite the widening ratio of military strength between Germany and Britain throughout the years of appeasement) was clouded by the fashions of the time, which were generally pro-eugenics, hostile to Jews, and *laissez faire* toward concentration camps. It was only after the holocaust was revealed that the evil of eugenics began to become crystal clear in the minds of such people. However, eugenics had always been quackery: the facts of evolutionary history show that you need *diversity* in order for evolution to occur, and it is diversity which provides strength. The eugenics "argument" is basically that diversity should be eliminated virtually to the point of having a race of clones. This is not strength, but weakness, because it means that emerging biological and other threats that one clone is susceptible to will also be threats to all the others. Basically, eugenics places all your eggs in one basket.

**Above:** Reagan's civil defense effort was opposed by the two-hour long ABC film aired on 20 November 1983, called *The Day After*, which led to a complaint about the "Reagan-like" voice of the President's broadcast after nuclear attack, in the 21 November 1983 *Washington Post*. (ABC responded by **changing the fictional President's voice to a more generic accent, in all later broadcasts and video releases of *The Day After*!**) President Reagan watched an advance video preview of the *The Day After* at Camp David on 10 October 1983, noting in his diary (published in his 1990 memoirs):

"I ran the tape of the movie ABC is running Nov. 20. It's called THE DAY AFTER in which Lawrence, Kansas is wiped out in a nuclear war with Russia. It is powerfully done, all \$7 million worth. It's very effective and left me greatly depressed ..."

**Above:** the 1992 BBC broadcast attack on Herman Kahn's civil defense facts by Adam Curtis, *Pandora's Box: To The Brink Of Eternity*. The clip of Kahn saying:

"Even if you irrationally decide to go to war, that doesn't mean that you have to fight it in a wildly irrational fashion,"

is taken out of context: Kahn is referring to the lesson of Britain's decision to go to war with Hitler in September 1939. Because of the pathetic year-on-year rate of Britain's rearmament compared to Germany's after 1935, Britain was in the most feeble state to go to war at that time. Kahn's argument is Britain should rationally have decided to go to war in say 1934 and stopped Germany's illegal rearmament with minimal combat (Britain was still more powerful in 1934), or surrendered completely to the Nazi threat. By leaving war until 1939, Britain was either (1) deliberately allowing the Nazis to prepare better for war than Britain (remember that in 1939 America was neutral and there was not even any sight of lend-lease on the horizon) or (2) behaving irrationally. Britain was declaring war irrationally, having been duped by lying weapons-effects-exaggerating appeasers into not declaring war when it had a chance of winning without American help. This is the first thing you need to understand about Kahn's statement. The second thing is that even though Britain declared war at a time which was irrational (it should have done that earlier, when the ratio of British to German strength was higher), it did not fight the war in an irrational fashion, nor did Germany. Neither side immediately despatched 100% of their bombers filled with weapons of mass destruction like gas or germs to kill the other side, despite the appeasers' pre-war certainty that war would escalate instantly into mass destructions with a million casualties a month predicted in Britain.

This is Kahn's second point: **even Hitler didn't immediately try to annihilate the world's population with his stockpile of mustard liquid contaminant or**

Nazi-discovered tabun nerve gas, of which thousands of tons were manufactured but never used by the Nazis because they didn't have enough gas masks to deal with mustard gas retaliation, owing to a rubber shortage. Kahn is following A. J. P. Taylor's *The Origins of the Second World War* standpoint on Hitler here; Hitler was a bigoted egotistical dictator, but so are most politicians at heart; most politicians are simply so inept that they fail to obtain enough power to corrupt them absolutely (a point long ago observed by 19th century historian Lord Acton: "And remember, where you have a concentration of power in a few hands, all too frequently men with the mentality of gangsters get control. History has proven that. All power corrupts; absolute power corrupts absolutely"). In other words, Hitler was not a unique thug; thugs are common. Taylor's point is that Hitler's 1930s propaganda was true to the extent that he was doing his best for the "Aryan" German. Hitler believed Britain wouldn't fight under any circumstances because that was what the leading British politicians and newspaper editors were saying when they exaggerated the effects of weapons and stated that Britain would be wiped out in war, so war was unthinkable. Kahn draws the lesson from this that war must never be unthinkable to the public again, if war is to be averted by unequivocal deterrence.

Curtis additionally gets the facts about Kahn wrong by claiming that Kahn's "flexible response" strategy was debunked by the Cuban missile crisis. Kahn makes it clear that "flexible response" was needed once the Soviet Union had a balance with America, not before that time. The Soviet Union was still behind America in 1962, so Kennedy could afford to promise massive retaliation in response to any missile being fired from Cuba in order to encourage Soviet caution with the missiles in Cuba. Massive retaliation would have been an empty promise if the Soviet Union had an immense stockpile of nuclear weapons in 1962. It didn't. Kahn had proposed flexible response for the late 1960s onwards.

#### **Duck and cover simple countermeasures were ignore by Kahn**

Kahn never really made the civil defense case effectively by getting to grips with the details of survival in Hiroshima and Nagasaki in different kinds of buildings, the effectiveness of "duck and cover", and the detailed scientific studies on nuclear weapons effects from tests remained Secret – Restricted Data until recent years. Politicians, policy makers, and even many nuclear weapons effect computation scientists are unaware of the vital data from Hiroshima, Nagasaki and nuclear tests!

**YOU GET WAR BY RENOUNCING TO THUGS THE FIRST USE OF WEAPONS: IT DOES NOT HELP TO REDUCE ACCIDENTAL WAR RISKS, SINCE HITLER AND THE OTHERS DID NOT COPY BRITISH DISARMAMENT TO EMBRACE PEACE (EXCEPT IN LYING PEACE PROPAGANDA); INSTEAD, THEY TOOK ADVANTAGE OF PRIME MINISTER CHAMBERLAIN'S PEACE PROMISES TO ESCALATE THEIR INVASIONS AGGRESSIVELY, IN THE BELIEF BRITAIN WOULD NEVER FIGHT BACK**

In April 1984, President Ronald Reagan told a press conference that General MacArthur should have been "allowed to lead us to a victory in Korea". Instead, MacArthur was fired by President Truman for requesting atomic bombs or radiological weapons to help overcome massive conventional weapons superiority. **Truman in December 1950 gave to British Prime Minister Attlee a secret guarantee to never use nuclear weapons in Korea, news of which was promptly leaked to the communists by the British spy who was head of the American Department of the Foreign Office, Donald Maclean. This was a carte blanche to the communists in Korea that American nuclear weapons were out of the picture, so the conventional war dragged on until President Eisenhower gained office and took tactical nuclear war far more seriously; suddenly the communists were then interested in negotiating a peaceful settlement of differences!**

"I think we're going to have to start a civil defense program. ... the United States should never put itself in a position, as it has many times, of guaranteeing to an enemy or a potential enemy what it won't do. ... President Johnson, in the Vietnam War, kept over and over again insisting, oh no, no, no we'll never use nuclear weapons in Vietnam ... **the Soviet Union has used propaganda campaigns to stop us from putting a weapon that we - a great deterrent weapon - that we had developed and they didn't have - and an economical weapon - and that was the neutron warhead.** They've got more than 20,000 tanks massed there opposite the NATO line. **The neutron warhead could have neutralized those tanks but again we stopped it** ... Woodrow Wilson ran for his second term on the promise or the pledge that he kept us out of wars. ... he took insult after insult ... **finally the Germans declared open warfare on all shipping in the Atlantic Ocean, regardless of whether you were a neutral nation or not. And the Lusitania was sunk and, finally, we were in a war.** ... the Kaiser got the idea from ... the policy that the United States was determined not to go to war. So he ignored that possibility ... Franklin Delano Roosevelt ran for his third term, and ran on his own personal promise, 'I will not send young Americans, your sons, to fight.' ... **you've got an ambassador who is assuring von Ribbentrop that the United States wouldn't go to war ... Hitler at this time said, we can count on it** ... the Japanese attacked Pearl Harbor.

**"... I say that we are going to war if a man like Carter continues giving the wrong signals, backing away from the Soviet Union. We will one day find ourselves pushed to the point where there is no retreat and we have no further choice."**

- Ronald Reagan, interviewed by Robert Scheer in 1980, pages 233-58 of *Scheer's With Enough Shovels: Reagan, Bush and Nuclear War*, Secker and Warburg, London, 1983. (See Richard Sincere's excellent "Shovelling appeasement" review of Scheer's political diatribe in the 4 February 1983 *Washington Times*, [linked here.](#))

"The only sure way to avoid war is to surrender without fighting. ... The other way is based on the belief that in an all out race our system is stronger, and eventually the enemy gives up the race as a hopeless cause. Then a noble nation believing in peace extends the hand of friendship and says there is room in the world for both of us."

- Ronald Reagan, 1963 speech, *Are Liberals Really Liberal?* (Source: Ronald Reagan, *In His Own Hand: The Writings of Ronald Reagan That Reveal His Revolutionary Vision for America*, Free Press, New York, 2001, p. 442.)

**"The thing that our well-meaning liberal friends refuse to recognise is that their whole reasonable 'let's talk this over' solution to the threat of the bomb is appeasement, and appeasement does not give you a choice between peace and war."**



- Ronald Reagan, 1964. (Martin Anderson and Annelise Anderson, *Reagan's Secret War: The Untold Story of His Fight to Save the World from Nuclear Disaster*, Crown Publishers, New York, 2009, p. 40.)

"Enough evidence of weakness or lack of will power could tempt the Soviets as it once tempted Hitler and the rulers of Japan."

- Ronald Reagan, 1975. (Martin Anderson and Annelise Anderson, *Reagan's Secret War: The Untold Story of His Fight to Save the World from Nuclear Disaster*, Crown Publishers, New York, 2009, p. 40.)

Martin and Annelise Anderson's 2009 book, *Reagan's Secret War: The Untold Story of His Fight to Save the World from Nuclear Disaster* gives transcripts from declassified U.S. National Security Council (NSC) meetings of Reagan during which communism was fought using secret techniques. On page 63 they quote Reagan from the secret 6 July 1981 NSC meeting transcript:

"The Soviets have spoken as plainly as Hitler did in 'Mein Kampf'. They have spoken [of] world domination - at what point do we dig in our heels?"

In a meeting between on 19 July 1981 in Ottawa, the French President Mitterrand told Reagan that French intelligence had recruited a KGB spy called Colonel Vladimir I. Vetrov, whose files disclosed that the Soviet Union: "had been running their research and development on the back of the West for years. Given the massive transfer of technology in radars, computers, machine tools, and semiconductors from U.S. to USSR, the Pentagon had been in an arms race with itself." (Quotation from Thomas C. Reed, *At the Abyss*, Ballantine Books, N.Y., 2004, p. 267.)

Reagan in response bankrupted the already economically weak Soviet Union by selling Saudi Arabia the "AWACS" early warning aircraft system (against opposition from Congress and Israel), and in response Saudi Arabia pumped out of the ground enough oil to flood the market after the US-USSR Geneva summit of November 1985, thus bringing the price of oil crashing down from over \$40 a barrel in 1981 to just \$13 a barrel in March 1986, devaluing the Soviet oil from Siberia: "a devastating drop for the economy of the Soviet Union" (Anderson's, p. 341).

The Saudis also donated \$1 million a month to the anti-communists (the Contras) in Latin America. (This success at selling arms for favors led to the Iran-Contra Affair, approved by Reagan on 7 January 1986. Oliver North on the NSC staff sold anti-tank missiles to Iran via Israel; Iran released five American hostages and North gave the profits to the Contras.) But it was the financial pressure on the Soviet economy from the loss of oil revenue which gave Reagan the leverage to make Gorbachev agree to arms cuts at the Reykjavik conference on 11-12 October 1986. Gorbachev himself admitted in his 1996 memoirs that the Soviet Union could no longer afford to buy American grain and also had to cut Siberian oil supplies to Eastern Europe in order to compensate for the loss of revenues caused by the falling price of oil: "a sharp drop in oil prices cost the Soviet Union nearly half of its hard currency earnings." (Mikhail Gorbachev, *Memoirs*, Doubleday, N.Y., 1996, p. 468.) Gorbachev was certain that Reagan engineered the drop in oil prices as a lethal attack on the Soviet economy, as he argued to Reagan at Reykjavik, when Reagan asked Gorbachev why he had stopped buying American grain to feed his people:

"It is very simple. You can tell them that the money with which the Russians could have bought grain ended up in the United States and Saudi Arabia because of the sharp drop in oil prices."

- Mikhail Gorbachev to Ronald Reagan, 12 October 1986, U.S. National Security Archive, "Transcript of Reagan-Gorbachev Summit in Reykjavik: Part 3", FBIS-USR-93-113 (page 11 of the PDF file linked here).

The Anderson's explain on page 342 of *Reagan's Secret War*:

"... the Soviets were in a dilemma, their dreams of taking over the world drifting away. The new leaders, led by Gorbachev, were beginning to realize that much change was needed to rescue their economy. In effect, the Soviets had given up trying to conquer the world and accepted the inevitable. The Cold War was close to being over. The Soviets were now focused on rescuing their country ..."

Aside from veteran anti-appeaser Thatcher mentioned in the earlier posts linked [here](#) and [here](#), someone else who encouraged and supported Reagan's successful war against communism in the 1980s was Pope John Paul II, a Pole and in 1978 the first non-Italian Pope since the 1520s. He was against the communist tyranny in his home country, Poland, where his visit in June 1979 had sown the seeds of hope against communism. On 15 January 1981, the Pope received a delegation of the anti-communist Polish Solidarity movement, headed by Lech Walesa, and gave them encouragement. Throughout the 1980s, the Pope was exchanging secret letters with Reagan and organizing personal meetings between his Vatican Secretary of State, Cardinal Casaroli, and Reagan in the White House. (This is documented in *Reagan's Secret War*.)

As explained in a previous post, Bishop Casaroli had in early 1978 arranged for Pope Paul VI to give the neutron bomb inventor Samuel Cohen the Medal of Peace for developing a nuclear weapon which did not cause collateral damage to civilians. Pope John Paul II in June 1979 elevated Casaroli from Bishop to Cardinal, and made him Vatican Secretary of State, and Cohen was invited to attend, which he did. After Mass, Casaroli introduced Cohen to Pope John Paul II: "in glowing terms as the Father of the Neutron Bomb. ... the Pope was one cool customer. He didn't bat an eyelash. We shook hands, he expressed his pleasure over meeting me. I expressed mine. ... I appreciated his own efforts for peace."

With both the Pope and his Vatican Secretary of State, Cardinal Casaroli, aware of the perils of communist threats and the efforts of American weapons designers like Cohen to negate the Warsaw Pact tank threat with nuclear weapons without risking collateral damage, Casaroli met Reagan on 15 December 1981. On 23 December

Reagan sent Soviet Premier Leonid Brezhnev a Top Secret personal letter, stating:

"The most elementary rights of the Polish people have been violated daily: massive arrests without any legal procedures; incarcerations of trade union leaders and intellectuals in overcrowded jails and freezing detention camps; suspension of all rights of assembly and association; and, last but not least, brutal assault by security forces on citizens. ...

"The United States cannot accept suppression of the Polish peoples. ... The United States will have no choice but to take concrete measures affecting the full range of our relationship." (Quoted by the Anderson's, pp. 87-8.)

The same day, Reagan broadcast a nationwide address on TV about the communist suppression in Poland, from the White House at 9pm:

"The men who rule them and their totalitarian allies fear the very freedom that the Polish people cherish. They have answered the stirrings of liberty with brute force, killings, mass arrests, and the setting up of concentration camps."

Reagan ordered the secret U.S. Department of Defense annual report *Soviet Military Power* to be declassified and published openly from the end of 1981 onwards, and he declared the Soviet Union an "evil empire" in a publicised speech to the National Association of Evangelicals on 8 March 1983. Soviet Premier Yuri Andropov, a former KGB director, found that the Soviet Union's World Peace Council propaganda effort was being opposed by counter-propaganda from Reagan. Reagan's civil defense initiative was widely opposed, so he simply switched to a new American ABM program to outwit the Soviet military, called Star Wars, in his speech on 23 March 1983:

"My fellow Americans ... I've become more and more deeply convinced that the human spirit must be capable of rising above dealing with other nations and human beings by threatening their existence. ... Let me share with you a vision ... It is that we embark on a program to counter the awesome Soviet missile threat with measures that are defensive. ... What if a free people could live secure in the knowledge that their security did not rest upon the threat of instant U.S. retaliation to deter a Soviet attack, that we could intercept and destroy strategic ballistic missiles before they reach our soil or that of our allies? ... Tonight, consistent with our obligations of the ABM treaty ... I am directing a comprehensive and intensive effort to define a long-term research and development program to begin to achieve our ultimate goal of eliminating the threat posed by strategic nuclear missiles. This could pave the way for arms control measures to eliminate the weapons themselves."

Reagan's strategy was far from being a new idea: *si vis pacem, para bellum*. Convince the world your will is weak, and you invite war. British Foreign Secretary Edward Grey in July 1914: "failed to clearly communicate to Germany that a breach of the treaty not merely to respect but also to protect the neutrality of Belgium — of which both Britain and Germany were signatories — would cause Britain to declare war against Germany. When he finally did make such communication, German forces were already massed at the Belgian border, and Helmuth von Moltke convinced Kaiser Wilhelm II it was too late to change the plan of attack." As President John F. Kennedy wrote in his book *Why England Slept*, Grey chose to lie that it was not his weakness that led to World War I (fellow Cabinet Minister Lloyd George emphasises the tragedy of Grey's weakness in his *War Memoirs*), but the arms race in Europe:

"The statement of Lord Grey, British Foreign Minister, made in 1914, that, 'The enormous growth of armaments in Europe, the sense of insecurity, and fear caused by them; it was these that made war inevitable,' had a tremendous effect on post-war British opinion. Armaments were looked upon as something horrible, as being the cause of war, not a means of defense. ... but England's failure to rearm has not prevented her from becoming engaged in a war; in fact, it may cost her one. The causes of war go deeper than armaments."

(John F. Kennedy, *Why England Slept*, reprinted by Greenwood, 1981, pp. 6-7.)

This fact is highly counter-intuitive to those who simplistically believe that the best way to avoid war is to disarm and/or guarantee to all potential aggressors that you are unprepared for any attack. So it is still today widely ignored. Few embrace the fact that **civil defense helps to deter attacks, since you invite attack and blackmail by being unprepared and vulnerable to terrorism and intimidation.**

"Whether or not Hitler paid attention to the Oxford students' vote [against fighting for liberty on 9 February 1933, just 10 days after Hitler became German Chancellor], there is little doubt that his aggressive policies were encouraged by the existence of strong pacifist sentiments in England and France. In October 1933, Hitler felt confident enough to withdraw from the international Disarmament Conference which had been meeting before he became Chancellor; this action was an official notification to the world that he intended to rearm Germany. Four days later, [Labour Party Leader George] Lansbury spoke for the Labour Party in the House of Commons: 'We will not support an increase in armaments, but we shall also refuse to support our own or any other government in an endeavour to apply penalties or sanctions against Germany. ...' The great nations were not about to disarm, as Lansbury well knew. His policy meant that England would simply do nothing ... The pacifists of England and France, by announcing their unwillingness to fight, made Hitler more reckless in risking war and made the war more terrible when it came." [Contrary to lying Prime Minister Chamberlain's propaganda, at no point did the rate of British rearmament after 1935 match the Nazis, so all the while that war was being delayed by appeasement, the relative situation was getting worse, with the Nazi lead increasing not falling.]

- Professor Freeman Dyson, *The Scientist as Rebel*, NYRB, N.Y., 2006, p. 121.

Britain's appeasement of Hitler during the 1930s was driven by the fear that the German air force would wipe out England in one fantastic bombing raid of lingering mustard gas liquid, incendiaries, and high explosives. Logically you would think that appeasing a dictator's demands would have made war less likely, but it didn't. This is a counter-intuitive fact about human nature. Being weak to a tyrant doesn't reduce the risk of accidental war. Telling a tyrant you won't strike first doesn't make the tyrant less likely to press the button; it makes the tyrant more likely to escalate to war, because the tyrant thinks the enemy will surrender under pressure.

**Above: Reagan's "tear down this wall" speech at the Berlin Wall on June 12, 1987**, a video clip beginning *after* Reagan has pointed out that "In the Communist world, we see failure, technological backwardness, declining standards of health, even want of the most basic kind - too little food. Even today, the Soviet Union still cannot feed itself."

On 12 August 1987, Reagan addressed the American people (**the Anderson's, p. 347**):

"The Soviets are now negotiating with us because we're negotiating from strength."

On 4 November 1987 Reagan broadcast an address to America at 8pm (**the Anderson's, p. 357**):

"Our plan depended upon unflagging solidarity and steadfastness of purpose, even under immense pressure. And the pressure was put on. Had the nuclear freeze and unilateral disarmament protesters won, Europe would now be condemned to live in the shadow of Soviet nuclear-armed **INF [intermediate nuclear forces]** missiles. ... That resolve has now made it possible to achieve an historic agreement - an agreement that will eliminate a whole class of United States and Soviet INF missiles from the face of the planet. ... We will closely watch the condition of human rights within the Soviet Union. It is difficult to imagine that a government that continues to repress freedom in its own country, breaking faith with its own people, can be trusted to keep agreements with others ... I visited Berlin. I stood there alongside the cruel wall that symbolizes so powerfully the scar that divides the European continent. It's time for that wound to heal and that scar to disappear."

Gorbachev agreed to visit America to sign the Intermediate Nuclear Forces (INF) Treaty on 8 December 1987, which destroyed 1,846 Soviet and 846 American weapons, helping to equalize the excess Soviet stockpile of short and medium range missiles, de-escalating the arms race at the same time. On 31 May 1988, during his visit to Russia to negotiate the details of his first **Strategic Arms Reduction Treaty (START I)** with Gorbachev (which was signed in 1991, and reduced the highly dangerous Soviet ICBMs by 4,100 and American ICBMs by 500), Reagan gave his **speech on the virtues of freedom versus communism at Moscow State University, Gorbachev's alma mater**:

"Standing here before a mural of your revolution, I want to talk about a very different revolution that is taking place right now, quietly sweeping the globe without bloodshed or conflict. Its effects are peaceful, but they will fundamentally alter our world ... It's easy to underestimate because it's not accompanied by banners or fanfare. It's been called the technological or information revolution, and as its emblem, one might take the tiny silicon chip ... we're emerging from the economy of the Industrial Revolution - an economy confined to and limited by the Earth's physical resources, **as one economist titled his book, 'The Economy in Mind'**, in which ... the freedom to create is the most precious natural resource. Think of that little computer chip. Its value isn't in the sand from which it was made but in the microscopic architecture designed into it ... Or take the example of the satellite relaying this broadcast around the world, which replaces thousands of tons of copper mined from the Earth and molded into wire. ...

"The key is freedom - freedom of thought, freedom of information, freedom of communication. The renowned scientist, scholar, and founding father of this university, Mikhail Lomonosov, knew that. 'It is common knowledge', he said, 'that the achievements of science are considerable and rapid, particularly once the yoke of slavery is cast off and replaced by the freedom of philosophy.'

"Some people, even in my own country, look at the riot of experiment that is the free market and see only waste. What of all the entrepreneurs that fail? Well, many do, particularly the successful ones; often several times. ... And that's why it's so hard for government planners, no matter how sophisticated, to ever substitute for millions of individuals working night and day to make their dreams come true. The fact is, bureaucracies are a problem around the world."

Reagan first visited the Berlin Wall in 1967, and **the Anderson's** explain that he was moved enough to challenge Robert Kennedy in a broadcast to tell the Soviet Union to remove the wall as a sign of goodwill in treaty negotiations: **starting with Günter Litwin who was shot trying to climb over on 24 August 1961, a total of 171 people died attempting to escape at the Berlin Wall between its foundation on 13 August 1961 and its fall on 9 November 1989.** The 2009 book, *Reagan's Secret War*, reprints declassified letters and meeting transcripts sent by Reagan to Soviet leaders throughout the 1980s, pressurizing them over the repression of Solidarity in Poland in 1981, over the treatment of dissenters by the secret police, the censorship of critics, and the restrictions on travel for the inmates of the Soviet Union. It was Reagan's pressure backed up with military resolve over Star Wars which caused Gorbachev to introduce **perestroika** in June 1987, leading to appointment by Gorbachev of Egon Krenz as Head of the East German Communist Party in October 1989. Gorbachev had withdrawn Soviet troops, leading to increasing protests for liberty in East Germany. On 9 November 1989 there were 750,000 demonstrators opposed by only 3,000 East German police. Krenz decided to diffuse the situation by relaxing travel restrictions, issuing a press statement which stated that travel permits would be issued at border points from 8 am on 10 November. At 7 pm on 9 November by Krenz's confused chief public relations spokesman, **Günter Schabowski**, was asked on television when the travel permits would be available and said "immediately", because Krenz had not explained the time it would begin. The confusion caused the 750,000 protestors, who were denied permits at checkpoints, to knock the wall down. On 28 November 1989, West German Chancellor Helmut Kohl announced his plan for the unification of East and West Germany. In a "domino effect", the symbolic fall of the Berlin Wall caused the Soviet Union to break up.

"The ultimate purpose of Western counterstrategy should be to compel the Soviet Union to turn inward - from conquest to reform. Only by blunting its external drive can the Soviet regime be made to confront its citizenry and to give an account of its policies. It is a well-known fact of modern Russian history that whenever Russian governments suffered serious setbacks abroad - in the Crimean war, in the 1904-5 war with Japan, and in World War I - they were compelled by internal pressure to grant the citizenry political rights. We should help the population of the Soviet Union bring its government under control. A more democratic Russia would be less expansionist and certainly easier to live with."

- Reagan's senior Soviet specialist on the National Security Council staff, former Harvard historian Richard Pipes, in his article, **"Soviet Global Strategy," published in *Commentary*, April 1980.**

"A senior White House official said Reagan approved an eight-page national security document that 'undertakes a campaign aimed at internal reform in the Soviet Union and shrinkage of the Soviet empire'."

- Helen Thomas, White House correspondent for United Press International, 21 May 1982. (Quoted by Robert Scheer, *With Enough Shovels*, Secker and Warburg, London, 1983, p. 7.)

Scheer's book is terribly naive on physics, denying that fallout radiation can easily be shielded by something as simple as earth or water. He was ignorant that the bigger the explosion, the longer the delay time that the blast takes to cover the bigger area of damage, giving most of the potentially hurt people enough time to duck and cover. He was ignorant that the thermal radiation pulse takes longer to deliver energy in bigger bombs, giving people time to duck and cover before being burned. He believed that any civil defense possible in Hiroshima would be useless against bigger nuclear bombs, when the opposite is of course the case, because the blast and fallout takes longer to arrive over larger areas, while the thermal radiation pulse duration scales up with the square root of bomb yield, taking ever longer to deliver its energy as the yield increases. Maybe Scheer, like most people, was misled by films like *The Atomic Cafe*:



**Above:** *The Atomic Cafe*, a 1982 documentary composed of historical nuclear age film clips from the *Trinity* test of 16 July 1945 to the height of the Cold War, tries to ridicule duck and cover by editing out the blast wave delay time in the film of soldiers in trenches near the Nevada *Dog* test, thus falsely superimposing the blast arrival for the soldiers on the flash of the explosion. Such editing falsely suggests that the blast wave travels at the velocity of light. It also edits the discussion of soldiers to make it appear that the sand blown up from the desert, which had never entered the fireball or been close enough to acquire neutron induced activity, was somehow magically contaminated.

An air burst like Hiroshima produces no significant local fallout; see post linked here for the measured radiation map of the test and the post linked here for the measured residual radiation at Hiroshima and Nagasaki. The firestorm took 30 minutes to begin and was not producing soot rainout until nearly an hour after the detonation, when the radioactive cloud was many miles downwind and was therefore not involved. The residual radiation measured in Japan, was neutron induced activity in the ground (which gave trivial doses in comparison to the initial nuclear radiation received in the first 20 seconds), plus a trivial salt slurry fallout which was mapped out downwind, and was due to the entrainment of salt crystals from the coastal low altitude air, as also occurred in the Pacific air bursts *King* and *Cherokee*, but not in Nevada tests which were far from the coast, as confirmed by cloud seeding rainout models.

It also presents a generally distorted view of the effects of nuclear weapons by showing the firestorm area of Hiroshima without stating it was due to obsolete wooden city construction with the overturning of charcoal cooking braziers in houses starting the thousands of fires which merged into a firestorm 30 minutes later, by which time many people had time evacuate the inner area on foot.

"... government films ... with Bert the Turtle teaching children how to 'duck and cover' were made suspect by such Hollywood films as *Fail-Safe*, *Dr Strangelove*, and *On the Beach*. The trade of New York for Moscow in *Fail-Safe*, the military running amuck in *Dr Strangelove*, and the impossible radiation scenario in *On the Beach* were, respectively, implausible, greatly exaggerated, and scientifically flawed. ...

"A recent film, *The Atomic Café*, points up the whole civil defense controversy. An audience viewing this film greets the 'duck and cover' clips from official government films with derisive laughter."

- Professors John Dowling and Evans M. Harrell, Editors, Preface to *Civil Defense: A Choice of Disasters*, American Institute of Physics, 1987, page vii.

"This story reminds me of Nevil Shute's *On the Beach*, published in 1957, a novel describing the extinction of mankind by radiological warfare. [Shute was the deputy chief design engineer behind the airship *R101* design, which crashed killing 48 people on its maiden voyage of 1930: this technically pseudo-scientific novel - published as being a realistic scenario - of his about nuclear warfare beautifully illustrates the lazy, poorly researched, incompetent, grandiose, cranks who were still being glorified as great airship designers in 1957 despite failure] ... The book and the film created an enduring myth, a myth which entered consciously or subconsciously into all subsequent thinking about nuclear war [Helen Caldicott credits *On the Beach* as the childhood cinema experience in Australia which led her later to dismiss civil defense as hopeless]. The myth pictures nuclear war as a silent inexorable death from which there is no escape, with radioactive cobalt sweeping slowly down the sky from the northern to the southern hemisphere. The people of Australia, after the northern hemisphere is dead, live out their lives quietly and bravely to the end. The Australian government provides a supply of euthanasia pills for citizens to use when the symptoms of radiation sickness become unpleasant. Parents are advised to give the pills to their children first before they become sick. There is no hope of survival ... *On the Beach* is technically flawed in many ways. Almost all the details are wrong: radioactive cobalt would not substantially increase the lethality of large hydrogen bombs [you only get 2.5 MeV of gamma rays per neutron captured in cobalt, spread out over many years, compared to 200 MeV including 6 MeV of residual gamma rays from fission products for every neutron fissioning U-238; the slower the release of a given amount of energy as radiation, the lower the dose rate, so you then have the time to decontaminate before getting a large dose]; fallout would not descend uniformly over large areas ... people could protect themselves from the radioactivity by sheltering under a few feet of dirt [or by sleeping in a simple core shelter improvised by tables stacked with plastic-bag lined boxes filled with water, and surrounded by furnishings] ..."

- Professor Freeman Dyson, "The Future Needs Us", in his book *The Scientist as Rebel*, NYRB, New York, 2008, pp. 42-3.

"The distribution of casualties of different types in Japanese buildings was greatly influenced by where the people happened to be at the time of the explosion. Had they been forewarned and knowledgeable about areas of relative hazard and safety, there would probably have been fewer casualties even in structures that were badly damaged." - Glasstone and Dolan, *The Effects of Nuclear Weapons* (1977), pp. 547-8

From chapter XII, "Principles of Protection: Basis for Protective Action", in the 1962/64 edition of *The Effects of Nuclear Weapons* (a PDF file of it is linked here; this chapter was removed from the 1977 edition to make way for a chapter on the EMP):

'In Japan, where little evasive action was taken, the survival probability depended upon whether the individual was outdoors or inside a building and, in the latter case, upon the type of structure. At distances between 0.3 and 0.4 mile from ground zero in Hiroshima the average survival rate, for at least 20 days after the nuclear explosion, was less than 20 percent. Yet in two reinforced concrete office buildings, at these distances, almost 90 percent of the nearly 800 occupants survived more than 20 days, although some died later of radiation injury.'

Note that 85% of the total mortality within concrete buildings occurred within 20 days of the explosion, and 99% occurred within 48 days: see Fig. 61 on p. 104 of Wayne L. Davis, William L. Baker and Donald L. Summers, *Analysis of Japanese Nuclear Casualty Data* (Dirkwood Corporation, Albuquerque, DC-FR-1045, 1966, linked here), based on 35,099 personnel (24,044 in Hiroshima and 11,055 in Nagasaki).

The percentage of deaths due to delayed effects has always been dwarfed by the natural cancer and natural genetic defect rates, see for instance *Radiation Research*, volume 146, 1996, pp. 1-27. In a controlled sample of 36,500 survivors, 89 people got leukemia over a 40 year period, above the natural leukemia number of 176 in the unexposed control group, due to the thermal instability of DNA which is naturally broken due to random molecular impacts from the Brownian motion of water molecules at body temperature, 37 °C. There were 4,687 other, "solid", tumour cancer deaths, which was 339 above the unexposed matched control group. Hence in the 36,500 Hiroshima survivors over 40 years there were 4,863 cancers of all kinds, which is 428 more than the unexposed control group. Hence, 12.2% naturally died from cancer over 40 years who weren't exposed to radiation, while for the irradiated bomb survivors the figure was 13.3%. No increase whatsoever in genetic malformations could be detected: any effect was so low it was lost in the statistical noise of *natural* genetic defects - the effect of body temperature on DNA again - for the sample size. Nature is a way, way, way bigger problem than radiation from nuclear bombs.

'Furthermore, of approximately 3,000 school students who were in the open and unshielded within a mile of ground zero at Hiroshima, about 90 percent were dead or missing after the explosion. But of nearly 5,000 students in the same zone who were shielded in one way or another, only 26 percent were fatalities. These facts bring out clearly the greatly improved chances of survival from a nuclear explosion that could result from the adoption of suitable warning and protective measures. [Table 11.17 on page 553 states that 50% survival after 20 days in Hiroshima occurred at 0.12 mile from ground zero for personnel in concrete buildings and 1.3 miles for personnel outdoors; an 11-fold difference in distances and a 120-fold difference in areas, casualty rates and the probability of becoming a casualty.] ... survival in Hiroshima was possible in buildings at such distances that the overpressure in the open was 15 to 20 pounds per square inch.' - Glasstone, *The Effects of Nuclear Weapons*, Chapter XII, *Principles of Protection*.

Professor Freeman Dyson, reviewing Thomas Stonier's book *Nuclear Disaster* (Meridian Books, 1963) in his 2006 book *The Scientist as Rebel* (pp. 74-6) makes the following points about the exaggerations of weapons effects, delivery capabilities, the use of gas and biological weapons of mass destruction, and on on, which led to the appeasement of the Nazis, encouraging their aggression:

"When Neville Chamberlain declared war on Hitler in 1939, one of his first acts was to empty London hospitals of their patients. Chamberlain expected catastrophic air attacks to begin immediately; the hospitals were asked to handle 250,000 civilian casualties within the first two weeks, besides another 250,000 people who were expected to become permanently insane. ...

"We made only one mistake; none of us in those days could imagine that England would survive six years of war against Hitler, achieve most of the political objectives for which the war had been fought, suffer only one third the casualties that we had had in World War I, avoid the massive and indiscriminate use of poison gas and biological weapons [due to civil defense preparedness], and finally emerge into a world in which our moral and humane values were largely intact. ...

"In the 1930s we held views about war very similar to those of Stonier, and these views turned out to be wrong. The experts who so grossly overestimated the effectiveness of bombing in 1939 made many technical errors, but their major mistake was a psychological one. They failed completely to foresee that the direct involvement of civilian populations in warfare would strengthen their spirit and social cohesion."

Chapter 12 of Stonier's 1963 book *Nuclear Disaster*, which we will review in detail later in this post, claimed falsely a nuclear winter would be caused by the dust caused in a nuclear war, after claiming falsely that brick and concrete cities would burn in intense firestorms like the wooden medieval buildings of Hamburg: the Hiroshima firestorm, in a city of wooden buildings with fewer stories height, was less intense and the Secret 1947 six volumes of the U.S. Strategic Bombing Survey report disclose that the thermal ignitions were due to thousands of overturned charcoal cooking braziers and partly to black coloured wartime blackout curtains in windows. In addition, Stonier discusses the spread of historical plagues by falsely claiming that insects as disease vectors would survive gamma radiation better than insect predators like birds. He cites but ignores the content of Dr Ralph F. Palumbo's paper (*Radiation Botany*, Vol. 1, pp. 182-9, 1962) on the rapid recovery of plants at Bogomongo (codenamed Belle by the Americans) Island in Eniwetok Atoll, just 2.55 statute miles from ground zero of both the 10.4 Mike test of 1952 and the 1.69 Nectar test of 1954 (Palumbo's full paper was discussed in detail in the earlier blog post linked here, and a PDF of the paper is linked here). Despite immense initial nuclear radiation, blast, water wave inundation, thermal radiation, and fallout, there were no insect plagues to wipe out the vegetation, which quickly regrew! Stonier blew it by concentrating on gamma radiation, which has trivial effects on insects at doses which are lethal in birds, ignoring beta radiation where the situation is exactly reversed (the feathers and skin of birds stop beta radiation which can't reach deep tissue; insects being much smaller get more severe effects than just superficial skin burns). Stonier also exaggerates by assuming 20 megaton yields and

drawing the wrong lessons from World War I. His epilogue on page 180 **ignores the fact that simple trenches were able to prevent complete and instant annihilation from high explosive shelling, dragging out the war for years despite the use of an immense amount of TNT per soldier on the battlefield! He ignores how this lesson of World War I evolved into the Anderson Shelter of World War II, protecting civilians.** Instead, on page 180 Stonier chooses to draw a straw man style World War I lesson from France's useless **Maginot Line**:

"Following World War I, the French, by building the Maginot Line, helped delude themselves into a false sense of security with an extension of World War I concepts. This magnificent engineering feat not only failed to save France from a determined enemy in World War II, but 'Maginot Line psychology' probably contributed substantially to the fall of that unhappy country. ... national security is assured only in a world in which any and all potential enemies are disarmed. ... In order to achieve this utopian goal, which would include the creation of new social institutions such as a world legal system, it is first necessary to change fundamental social attitudes. This is not nearly as difficult as it is often assumed."

The French assumed that Germans would attack directly from Germany, not via Belgium. The Nazis invaded Belgium, by-passing the Maginot Line by simply driving their tanks through the Ardennes Forest to invade France, a route which the Maginot Line fortifications had ignored. **The problem is that in the 1930s Stonier's ideals were represented by the League of Nations, which failed to stop World War II: a majority of members voted to do nothing that could possibly provoke an angry response from Hitler, because they had well and truly deluded themselves that another war would exterminate humanity by high explosive blast, incendiaries, gas bombs, and biological warfare. So the threat from the Nazis appeared smaller than the threat from war, Churchill's warnings went unheeded or opposed as "war-mongering" and the "peace-makers" signed ever more worthless pacts and agreements with the Nazis to enable themselves to believe that they were doing all they could for humanity.** The lesson of the Ardennes Forest is not - contrary to Stonier - that all defenses should be rejected because they can be circumvented. That is just like claiming that seatbelts, hospitals, ambulances, lifeboats, life guards, etc., are useless because they can't always save people's lives if the disaster is too overwhelming. This is wrong. The lesson is that France should have *not* merely build a defense line and then disarmed with the delusion of safety. France should have additionally retained enough protected military strength to inflict unacceptable damage upon an aggressor or combination of aggressors, thus deterring an attack and giving also some political leverage to force the enemy to renounce the terrorism of the Jews and other minority groups. This is exactly what President Reagan did to help the people living in the tyranny of the Soviet Union. Reagan didn't need to start a war, just to remain strong enough to get the most draconian restrictions of communism lifted. Once that happened, tyranny collapsed by itself.

*The Atomic Café*, like other popular bias propaganda, presents the film of wooden houses being blown up in Nevada tests and the visible effects of *Bravo* fallout, without stating that city construction is now far more resistant concrete, brick and steel frame buildings (graphs below from Hiroshima), and that fallout decays very rapidly since 72% of fission products have half lives of less than 24 hours, and fallout radiation can be readily shielded by improvising countermeasures in the time between the explosion and the delayed deposition of wind carried material. Although historically interesting, it is politically-biased by falsely making countermeasures appear useless: contrary to the falsified film clips of nuclear explosions, the blast is delayed like thunder after lightning, giving most people in the otherwise hazardous area enough time for "duck and cover" against flying glass and debris (and the thermal flash in the case of high yield weapons), even if there is no attack warning given. **By 1982, Western (not Soviet!) civil defence had been effectively but falsely ridiculed by the Soviet Union's Brezhnev-controlled, Moscow-based "World Peace Council" and related pressure groups for many years.**

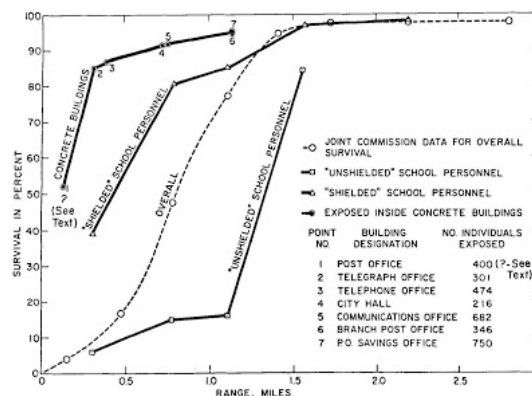


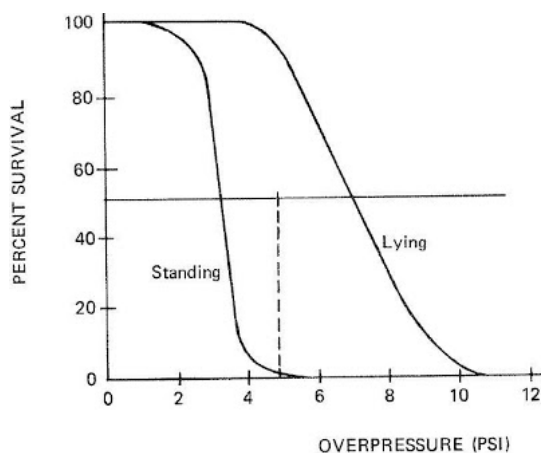
Fig. 5—Percentage of survivors as a function of range from Ground Zero (Hiroshima). (Ref. Joint Commission Report, Vol. VI, Document NP-3041.)

**Above:** graph showing the factual evidence for civil defence against the nuclear weapon explosion at Hiroshima, 6 August 1945, from Dr Ashley W. Oughterson and Dr Shields Warren (editors), *Joint Commission for the Investigation of the Effects of the Atomic Bomb in Japan*, Vol. VI, Document NP-3041, as presented by **Dr Clayton S. White, *The Nature of the Problems Involved in Estimating the Immediate Casualties from Nuclear Explosions*, U.S. Atomic Energy Commission report CEX-71.1, 1971 (downloadable as a PDF file from this link).** White shows at pages 16 and 26 that the data from the Hiroshima post office, the concrete building shown at point 1 in the graph (i.e., 50% survival at 0.12 mile from ground zero) has been simplified by averaging survival for all locations in that building: the actual 50% survival distance varied from about 0.08 mile for the ground floor of a concrete building (which was well protected from direct initial nuclear radiation, by the mass above) to about 0.23-0.32 mile for the upper floors, where there was little protection from the air burst's intense initial nuclear radiation dose that **escaped after some elastic scatter in the steel nose forging of the gun-type assembly weapon design (click here for a review of the doses in Hiroshima and Nagasaki, as calculated by the latest dosimetry).** On page 20, White states:

"This of course indicates that ... one should be alert for the possibility of many more early survivors in case of a nuclear conflict than have been estimated over the past several years."

The graph above is the source of the data in Glasstone and Dolan, *The Effects of Nuclear Weapons* (1977), Table 12.17 on page 546, which states that the distance from ground zero in Hiroshima for 50% survival (i.e. the median survival distance) after 20 days was 0.12 miles for people in concrete

buildings and 1.3 miles for people standing outdoors. Therefore there was a ratio of  $1.3/0.12 = 11$  for the median survival distance for modern city buildings, to that for people flash burned, irradiated and blasted while standing in the open. This ratio of distance implies a ratio of median lethal areas of  $11^2 = 120$ . Hence, taking cover in modern city buildings would reduce the risk of being killed by a factor of 120 for Hiroshima conditions, contrary to popular media presented political propaganda that civil defence is hopeless.



Effectiveness of duck and cover on survival in demolished wood frame houses  
SOURCE: Panel 10 of Chapter 2 of FEMA's 1987 "Attack Environment Manual" FEMA 126

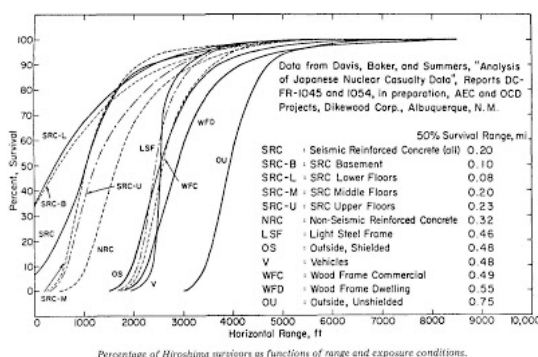
**Above: duck and cover effectiveness against blast missiles such as flying glass and wall debris in houses, as well as bodily translation from the blast winds entering windows and demolished walls and throwing people against debris; from FEMA's June 1987 *Attack Environment Manual*, Chapter 2.** For the detailed analysis of the effect of lying down on reducing blast injuries from the area exposed to flying debris and blast winds, see **Anatol Longinow, et al., "People Survivability in a Direct Effects Environment and Related Topics", IIT Research Institute, report AD764114, May 1973 (259 pages, PDF download linked here)**, and also their report **"Casualties Produced by Impact and Related Topics of People Survivability in a Direct Effects Environment", ADA011108, August 1974 (228 pages PDF linked here)**.

"The high incidence of flash burns caused by thermal radiation among both fatalities and survivors in Japan was undoubtedly related to the light and scanty clothing being worn ... If there had been an appreciable cloud cover or haze below the burst point, the thermal radiation would have been attenuated somewhat and the frequency of the flash burns would have been much less. Had the weather been cold, fewer people would have been outdoors, and they would have been wearing more extensive clothing. Both the number of people and individual skin areas exposed to thermal radiation would then have been greatly reduced ... These facts emphasize the influence of circumstances of exposure on the casualties produced by a nuclear weapon and indicate that shielding of some type can be an important factor in survival." – **Glasstone and Dolan, *The Effects of Nuclear Weapons* (1977), pp. 545-6**

Oughterson and Warren (1956) and Glasstone and Dolan (1977) state that the ground range for children standing outdoors in school grounds without any line-of-sight thermal radiation shielding was 1.3 miles for 50% survival in Hiroshima; this corresponds to a free-field peak overpressure of 3 psi and 5 cal/cm<sup>2</sup> thermal radiation exposure.

**All Japanese and most American political anti-civil defence propaganda groups have censored out the influence of building type on survival rates, but Wayne L. Davis, William L. Baker and Donald L. Summers studied 35,000 people exposed to nuclear weapons in Japan and state in their 322 page long report *Analysis of Japanese Nuclear Casualty Data* (Dirkwood Corporation, Albuquerque, DC-FR-1045, 1966) that for the unshielded general population of Hiroshima (not just school children) the 50% survival (i.e. median lethal) ground range was 0.75 mile outdoors where the free-field peak overpressure was 7.9 psi and the thermal radiation was 15 cal/cm<sup>2</sup>.**

**They found a median lethal distance of 0.48 mile (13 psi free-field peak overpressure and 30 cal/cm<sup>2</sup> out of shadows) for people shielded outside by buildings, trees, etc., between them and the fireball, and for people in vehicles (graph and table below, prepared to White's group):**



Percentage of Hiroshima survivors as functions of range and exposure conditions.



FIFTY-PER CENT SURVIVAL CONDITIONS FOR HIROSHIMA

LOCATION	HORIZONTAL RANGE 23 DIKEWOOD		MAX OVER-PRESSURE ENW <sup>1</sup>	THERMAL RADIATION ENW <sup>1</sup>
	mi	ft	psi	cal/cm <sup>2</sup>
SRC, SEISMIC REINFORCED CONCRETE (ALL)	.20	1,056	19.8	67
SRC, BASEMENT	.10	528	25.6	80
SRC, LOWER FLOORS	.08	422	26.4	83
SRC, MIDDLE FLOORS	.20	1,056	19.8	67
SRC, UPPER FLOORS	.23	1,214	18.0	63
NON-SEISMIC REINFORCED CONCRETE	.32	1,690	14.0	49
LIGHT STEEL FRAME	.46	2,429	13.3	32
OUTSIDE SHIELDED	.48	2,534	13.2	30
VEHICLES	.48	2,534	13.2	30
WOOD FRAME COMMERCIAL	.49	2,587	13.1	29
WOOD FRAME DWELLING	.55	2,904	12.0	25
OUTSIDE UNSHIELDED	.75	3,960	7.9	15

Dirkwood Corporation analyzed the nuclear radiation doses in Japan using DS86 dosimetry in the 1990 report by R. L. Stohler, *Japanese Nuclear Casualty Data Combined Injury and Mortality Analysis*, ADA219691.

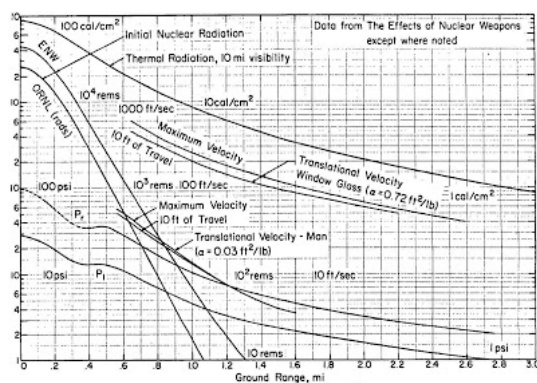
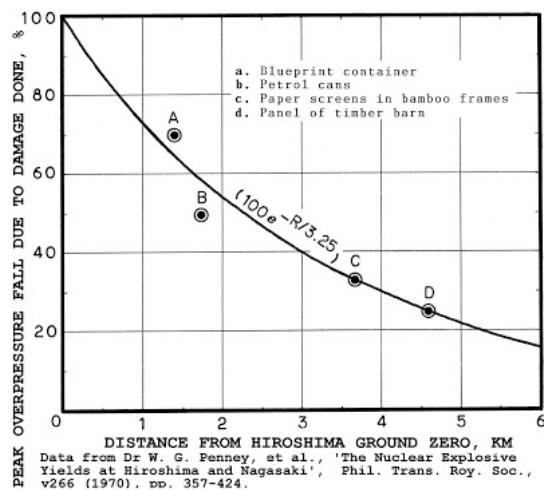


Fig. 12—Comparative range-yield effects relationships for Hiroshima 12.5-kiloton burst at 1870 ft (570 meters) above sea-level terrain.

**Above:** Dr White's analysis of the casualty-causing phenomena of the Hiroshima nuclear explosion, 6 August 1945, using data his team obtained from numerous 1950s nuclear weapons test experiments on window glass acceleration, bodily translation and flying debris impact injuries. See, for example, the simple yet effective mathematical model developed for predicting the motion of blast wind accelerated people, glass fragments and other debris: **I. Gerald Bowen, et al., "A Model Designed to Predict the Motion of Objects Translated by Classical Blast Waves"**, U.S. Atomic Energy Commission, Civil Effects Test Operations report CEX-58.9 (1961), ADA394861; for *Plumbbob* 1957 nuclear test data on the filmed motion of flying dummies, see **Rinaldo V. Taborelli, I Gerald Bowen and E. Royce Fletcher, "Tertiary Effects of Blast - Displacement"**, preliminary report ITR-1469 (1957; this "interim test report" contains some information which was edited out of the final version) and the final version, weapon test report WT-1469. For similar effects from high explosives see their 1962 report DASA-1336, their 1966 report DASA-1859, and their 1971 report DASA-2710. Translation impact research is contained in **DASA-1245** and, for flying debris from *Teapot* nuclear tests, see **WT-1168** and **AECU-3350**, while *Plumbbob* biological effects data is in report **WT-1470**. The velocity of horizontally flying debris is dependent on the blast wind pressure and to some extent by the duration of the blast winds. For small objects like glass fragments, the winds last longer than the time taken for the object to reach its "terminal velocity" in the blast wind, so the wind duration is then irrelevant, but heavier objects take longer to be accelerated to that velocity so they reach higher velocities if the blast duration is longer (higher explosion energy yields). In the case of falling debris from the actual collapse of buildings, the vertical velocity of the debris is independent of the blast wave pressure and duration, as discovered in some drop tests first made by **Mr Galileo** (Newton discovered - by combining Galileo's result with Kepler's laws of planetary motion - that the motion of falling debris merely depends on our planet's mass and radius): for fall height  $S$  metres, the building collapse debris velocity - unless retarded significantly by air drag or obstructions - is  $4.43S^{1/2}$  m/s (from  $v = [2gS]^{1/2}$ ). But staircase cupboards and strong tables (the **Morrison effect**) have regularly resisted the debris load when a small building collapses. (Taller buildings have stronger wall construction and are more resistant to collapse anyway, as seen in Hiroshima and Nagasaki.)

The peak overpressures and other data shown are "free-field" and apply to a nuclear weapon test in the unobstructed Nevada desert, not to the built up area of Hiroshima. This analysis of Hiroshima using nuclear test data was done to allow the results to be correctly scaled to other burst conditions, weapon yields, population distribution, type of buildings, etc. Thus, British Atomic Weapons Research Establishment founder **Dr William Penney personally investigated the actual peak overpressures in Hiroshima in 1945 by sensitive blast peak overpressure indicators like the volume reduction of blast crushed empty petrol cans, the bending of steel poles, and so on**, and found that the use of energy by the blast wave in causing destruction exponentially reduced the peak overpressure with distance, relative to that on an unobstructed desert:

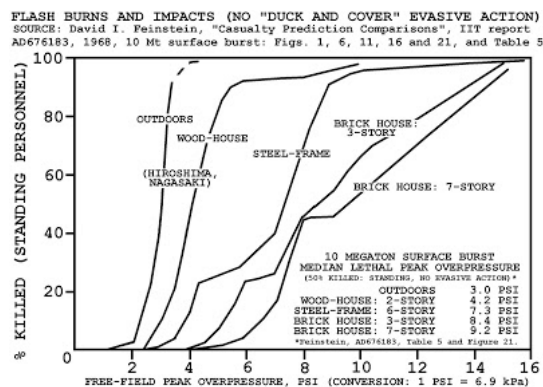




The very first edition of Glasstone's nuclear effects handbook, *The Effects of Atomic Weapons*, 1950, on page 57 has a section written by John von Neumann and Fredrick Reines of Los Alamos (it is attributed to them in a footnote) stating factually:

"... the structures ... have the additional complicating property of not being rigid. This means that they do not merely deflect the shock wave, but they also absorb energy from it at each reflection.

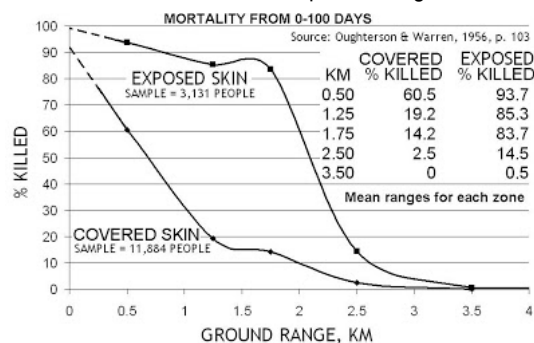
"The removal of energy from the blast in this manner decreases the shock pressure at any given distance from the point of detonation to a value somewhat below that which it would have been in the absence of dissipative objects, such as buildings."



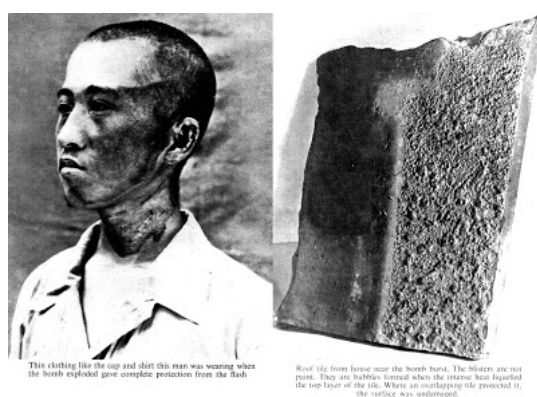
Above: David I. Feinstein of IIT Research Institute, Chicago, Illinois, developed a computer model (based on effects measured at nuclear tests), showing the large differences in protection between different types of building. Hiroshima and Nagasaki only burned down because they were overwhelmingly composed of wood-frame houses containing easily overturned charcoal cooking braziers which were aflame at the times of the attack (breakfast time Hiroshima; lunch preparation time Nagasaki).

Brick, concrete, and steel frame buildings are far more fire resistant (the Twin Towers fires were due to the injection of aviation fuel, which nuclear weapons don't provide). Feinstein's report AD676183 is based on a 10 megaton nuclear surface burst, which has a longer blast wind drag duration than the smaller Hiroshima and Nagasaki explosions, so the speed attained by blast carried debris is greater and casualty rates are higher for blast for any fixed peak overpressure. There are huge differences in the median (50%) lethal peak overpressure for different situations: outdoors, 50% of people standing without any thermal radiation shadowing will be killed by burns and wind drag impacts for 3.0 psi, but inside a 7-story load-bearing brick warehouse 9.2 psi is needed. The types of buildings predominating in all modern cities provide immensely more protection than was generally available in Hiroshima and Nagasaki. In the predictions above, people are assumed to be standing with no "duck and cover" countermeasures. Injuries are here due primarily to flying glass, flying debris, bodily displacement by wind drag, and flash burns.

Because the blast wave takes time to arrive after the flash over large areas, unlike the popular impression based solely upon the always-lying television propaganda films of nuclear detonations whereby the blast effect is without exception falsely superimposed on the first flash of the explosion, there is enough warning time over most of the damaged area for people to effectively duck and cover even if there is no attack warning given (due to government secrecy or incompetence), since lying prone allows the body length to attenuate some of the direct initial gamma radiation mid-line dose by self-shielding of tissue (see U.K. National Archives report HO 225/14, linked here), cuts down exposure to the thermal radiation by shadowing, and eliminates most dangers from wind drag and the exposed body area to flying glass and other debris as will be illustrated later in this post with data from Hiroshima. Note that Feinstein's model for standing personnel is accurate, but the results predicted for prone personnel are exaggerations because they ignore the shielding from thermal radiation by shadowing and do not properly account for the sliding resistance to translation. In addition, covering under a strong table or under a strong staircase - the "Morrison shelter" effect in WWII Britain, also demonstrated by 1950s nuclear tests on brick houses - protects reasonably well against the debris collapse of a house, since the weight of falling debris when a house collapses is completely unaffected by the strength of the blast wave.

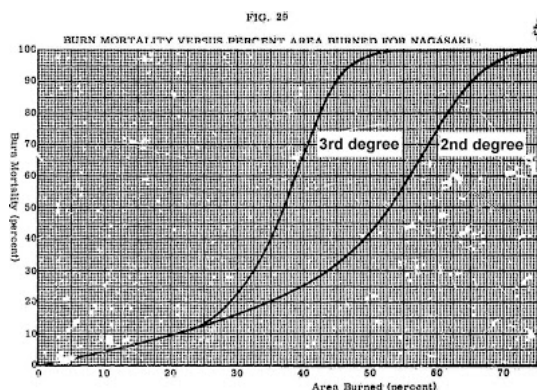


Above: Dr Shields Warren and Dr Ashley Webster Oughterson compiled detailed data on the survival of groups of people at various distances in Hiroshima according to the degree of protection they had in their book *Medical effects of the atomic bomb in Japan, by the Joint Commission for the Investigation of the Effects of the Atomic Bomb in Japan* (McGraw Hill, New York, 1956, p. 103). The high casualty rates from thermal radiation in Japan are not generally applicable to other situations. The U.S. Congressional Office of Technology Assessment study *The Effects of Nuclear War* in 1979 pointed out that on a cold winter night typically only 1 % of the population would be exposed to thermal radiation, compared to typically 25 % for the summer and daytime. In addition, the weather (atmospheric visibility) affects thermal transmission from bomb to target, just as the wind direction affects fallout delivery to a target in a surface burst. Nobody therefore can assert that a nuclear weapon explosion will automatically produce the effects exhibited on Hiroshima. Even if the atmospheric conditions were similar, other factors would be different and the results would not be the same.



Above: at Hiroshima any opaque object like a hat prevented burns, so if personnel had ducked and covered when they saw the bomb fall, they would have avoided the thermal burns and flying glass injuries which caused the **lethal synergism of combined infected wounds and radiation-depressed white blood cell counts, where the radiation exposure would not have caused a lethal effect if unaccompanied by burns and other trauma** (see the diagram below). Experiments on glass window breakage similarly show that even just by ducking 10, 20 and 24 degrees angle below the horizontal from behind from a glass window, reduces the number of skin-penetrating, blast-wind accelerated, high velocity glass fragments to a unit area of skin to about 40 %, 15 % and only 10 %, respectively, of the values horizontally behind the window (ref.: page 21 of Dr E. Royce Fletcher's report *Glass Fragment Hazard from Windows Broken by Airblast*, ADA105824, DNA 5593T, 1980; **clothing also provides a measure of protection**). This demonstrates that even feeble "duck and cover" reduces not just the thermal flash exposure from nuclear weapons, but also the blast fragment laceration hazard.

Some 3 metres behind a glass window 1.37 x 1.83 metres in size, bare skin can be exposed to 140 incised wounds, the maximum number possible for a median glass fragment velocity of 40 m/s; this is reduced to 8 wounds if clothing is worn. For higher median velocities, the necessary shock wave is stronger, making more fragments with smaller individual mass, so the momentum per fragment in fact falls despite the increase in velocity. (See Figure 16 on page 31 of E. Royce Fletcher, Donald R. Richmond, and John T. Yelverton, "Glass Fragment Hazard from Windows Broken by Airblast," Lovelace Biomedical and Environmental Research Foundation, report ADA105824, DNA-5593T, 1980. Hence clothing can provide protection factors as high as  $140/8 = 18$  for reducing the number of glass fragment wounds, permitted the use of clothed parts of the body to shield unclothed parts.)



Above: the data from 11,055 Nagasaki case histories allowed Wayne L. Davis, William L. Baker and Donald L. Summers, in their report *Analysis of*

*Japanese Nuclear Casualty Data* (Dirkwood Corporation, Albuquerque, DC-FR-1045, 1966, Figure 29, page 43), to analyze the relationship between the percentage of body area burned (up to 40% for unclothed flash burns from the direct line-of-sight thermal flash, since the back and sides will not be exposed if facing the explosion, and up to 100% for flame burns due to fires ignited by overturned charcoal lunch cooking braziers in blasted wooden houses) and mortality for 2nd degree (blistering) and 3rd degree (charring) skin burns. 1st degree burns were basically similar to sunburn and did not result in lethal infections. These curves above apply to combined synergism of thermal and nuclear radiation exposures. Most of the casualties in both cities were due to blast and thermal radiation, with infected wounds made worse by the synergism of initial radiation exposure, which lowers the white blood cell count; [see the PDF linked here of James W. Brooks et al., "The Influence of External Body Radiation on Mortality from Thermal Burns", \*Annals of Surgery\*, vol. 136 \(1952\), pp. 533–45.](#) (See also: G. H. Blair *et al.*, "Experimental Study of Effects of Radiation on Wound Healing", in D. Slome, Editor, *Wound Healing*, Pergamon, N.Y., 1961.) Notice that for both types of burns, if only 20% of the surface area of the body was burned (either blistering or charring), the mortality rate was less than 10%. **In medicine, the "rule of nines" allows the percentage of the body surface area to be quickly estimated:**

Head and neck equal ..... 9%  
 Anterior trunk equals ..... 18%  
 Posterior trunk equals ..... 18%  
 Upper extremities (each 9%) ..... 18%  
 Lower extremities (each 18%) ..... 36%  
 Perineum ..... 1%

This demonstrates that a reduction of the area of skin exposed to the fireball thermal radiation can be vitally important in reducing the risk of mortality in nuclear war. Duck and cover is not a fraud. The protection afforded by clothing was established by Nevada nuclear tests and is reported in *Capabilities of Atomic Weapons* TM 23-200, November 1957 (dark clothing may flame and smoke at the higher exposure levels, but if the person is lying on the ground they can roll over to extinguish flames as the thermal pulse subsides):

Table 6-2. Critical Radiant Exposures for Burns Under Clothing  
 (Expressed in cal/cm<sup>2</sup> incident on outer surface of cloth)

Clothing	Burn	1 KT	100 KT	10 MT
Summer Uniform.....	1°	8	11	14
(2 layers).....	2°	20	25	35
Winter Uniform.....	1°	60	80	100
(4 layers).....	2°	70	90	120

**Above: American data for thermal energy needed for burns under clothing, from page 6.2b of the 1960 (change 2 pages revision) *Capabilities of Atomic Weapons*, TM 23-200, Confidential.**



Bank of Japan building after attack on Hiroshima

**Above:** the 3-storey Bank of Japan was a modern type concrete building which survived 0.25 mile from ground zero in Hiroshima where the peak overpressure was 18 psi. The U.S. Strategic Bombing Survey found that half of the 100 people in the building survived; there were injuries to those standing near windows from horizontally flying glass window fragments, debris, nuclear and thermal radiation. No ignitions occurred in the building from blast or thermal radiation effects, and it was not ignited by burning wooden buildings 25 feet away. At 1.5 hours after the explosion, however, a firebrand from burning trees in the surrounding firestorm of wooden buildings containing overturned charcoal cooking braziers started a fire on the second storey: "The survivors extinguished the blaze with water buckets, preventing further damage. A little later, a fire started on the third floor. It was beyond control when discovered and the third floor burned out. But the fire did not spread to the lower floors." (This quotation is from **Panel 26 of the DCPA Attack Environment Manual, Chapter 3, CPG 2-1A3, June 1973, PDF linked here**; see also the **September 1989 revision, FEMA-127, online PDF linked here, which gives later research data on the fuel loading of cities and the effect of blast in blowing out thermal ignition apart from open pans of ignited liquid fuel or the *Encore* instant flashover due to the ignition of rooms stuffed full of flammable kindling with windows having a direct view of the fireball.**)

"Once a mass fire has formed, the usual prognosis for people trapped within the fire area is not very favorable. [However] ... records show that more than 85 per cent of the 280,000 people in the firestorm area of Hamburg survived ... (Earp, Kathleen F., *Deaths from Fire in Large Scale Air Attack with Special Reference to the Hamburg Fire Storm*, U.K. Home Office Scientific Advisory Branch report CD/SA-28, 1953; U.K. National Archives document reference: HO 225/28)." - Dr Abraham Broido, "Surviving Fire Effects of Nuclear Detonations", *Bulletin of the Atomic Scientists*, March 1963, pp. 20-3.

This fire-fighting also saved the Geibi Bank Company building in Hiroshima which again was not ignited by thermal radiation, despite being close enough to receive a peak overpressure of 8 psi. Firebrands from the firestorm around it caused some furnishing and curtains on the 1st and 3rd floors to ignite: "The fires were extinguished with water buckets by the building occupants. Negligible fire damage resulted. ... If one assumes that Americans can do what the unsuspecting residents of Hiroshima did, self-help measures ... would appear to be effective."



Geibi Bank Co. building after attack on Hiroshima

### A SANE POLICY (*Harvard Crimson*, Monday, October 30, 1961):

It has been brought to our attention that certain elements among the passengers and crew favor the installation of "life" boats on this ship. These elements have advanced the excuse that such action would save lives in the event of a maritime disaster such as the ship striking an iceberg. Although we share their concern, we remain unalterably opposed to any consideration of their course of action for the following reasons:

1. This program would lull you into a false sense of security.
2. It would cause undue alarm and destroy your desire to continue your voyage in this ship.
3. It demonstrates a lack of faith in our Captain.
4. The apparent security which "life" boats offer will make our Navigators reckless.
5. These proposals will distract our attention from more important things i.e. building unsinkable ships. They may even lead our builders to false economies and the building of ships that are actually unsafe.
6. In the event of being struck by an iceberg (we will never strike first) the "life" boats would certainly sink along with the ship.
7. If they do not sink, you will only be saved for a worse fate, inevitable death on the open sea.
8. If you should be washed ashore on a desert island, you will be unaccustomed to the hostile environment and will surely die of exposure.
9. If you should be rescued by a passing vessel, you would spend a life of remorse mourning over your lost loved ones.
10. The panic engendered by a collision with an iceberg would destroy all vestiges of civilized human behavior. We shudder at the vision of one man shooting another for the possession of a "life" boat.
11. Such a catastrophe is too horrible to contemplate. Anyone who does contemplate it obviously advocates it.

- Committee for a Sane Navigational Policy: Stephan A. Khiney '62, Robert Fresco '63, Richard W. Bulliet '62, Donald M. Scott '62.

This 1961 *Harvard Crimson* parody of the vacuous political objections to President Kennedy's civil defence program to a rejection of lifeboats for ships was quoted and expanded upon by strategist and civil defence advocate Herman Kahn in his 1962 book *Thinking About the Unthinkable*, where Kahn points out that the anti-lifeboat fanatics could add the deceptive complaint that adding lifeboats to a ship increases the weight on the ship, thereby increasing the rate of sinking in a disaster, making the problem worse! The point is, "objections" to civil defence are vacuous and are supported not by facts or by science, but by political bias, groupthink and wishful thinking. (This 1961 lifeboats analogy to civil defence is adapted to ambulances in the August 1962 magazine *Fission Fragments*, issue number 3, pages 14-5, located in the U.K. National Archives as document HO 229/3, edited by W. F. Greenhalgh of the Home Office civil defence Scientific Adviser's Branch, London. In the 1980s, after the compulsory introduction of car seat belts, they used those as the analogy instead in official civil defence publications such as the November 1981 U.K. Government publication *Civil Defence - Why We Need It* which states: "Why bother with civil defence? Why bother with wearing a seat belt in a car? Because a seat belt is reckoned to lessen the chance of serious injury in a crash." The first publication of the ship analogy to civil defence is at page 3 of the 1938 British Home Office public civil defence manual, *The Protection Of Your Home Against Air Raids*: "On board ship, both crew and passengers are instructed where to go and what to do, not when danger threatens, but beforehand. The captain considers it a matter of ordinary routine and everyday precaution that everything is in readiness for a shipwreck which he hopes will never happen.")

In fact, the analogy of civil defence to lifeboats goes a lot deeper: for many years lifeboats were in fact "debunked" and ridiculed as silly, expensive, useless, etc. That came to a dramatic end in 1912 with the testimony of Commander Charles Lightoller, the Second Officer aboard the *Titanic*, who was ordered to fill a grossly



inadequate number of lifeboats, choosing who would survive and who would die. He recommended to the inquiry that lifeboat capacity be based on numbers of passengers and crew instead of ship tonnage, that lifeboat drills should be conducted regularly on ships so passengers know where their lifeboats are and crew know how to operate them, and that early warnings of ice and collision should be given by radio communications in all passenger ships. Summarizing the points made in Walter Lord's minute-by-minute account of the disaster based on interviews with 63 survivors, *A Night to Remember* (Longmans, Green and Corgi, London, 1956), Dr Tom Stonier explained this obvious analogy between the inadequate disaster preparations of the *Titanic* and the panic due to the inadequacy of civil defence for nuclear attack in Hiroshima, on page 55 his 1964 book *Nuclear Disaster* (Penguin, London):

"The immediate survivors of a disaster are ... frequently so frightened or so stunned that they cannot utilize the resources available to them with the greatest effectiveness, nor can they muster the courage to conduct rescue operations. Nowhere is the incapacitating effect of fear more clearly illustrated than by the events that followed the sinking of the *Titanic* in 1912. Of sixteen hundred men, women, and children in the ice water, only thirteen people were picked up by the half-empty lifeboats nearby. Only one of the eighteen boats made the attempt to return and rescue them. The others failed to lend assistance out of fear of being swamped. In boat after boat, the suggestion to go back and help was countered by the sentiment, 'Why should we lose our lives in a useless attempt to save others from the ship?'

"The damaging effect of fear is therefore not so much that it elicits the flight reaction, which is a healthy, normal, and life-saving response, but that it leads to a paralysis of judgement and action that tends to prevent the maximum use of available resources and thereby prevents preserving the maximum number of lives."

Robert Jungk's book, *Children of the Ashes* (Heinemann, London, 1961) cites a report in Hiroshima by American psychologist Woodbury Sparks called *Panic Among A-Bomb Casualties at Hiroshima* which showed that due to their surprise at the effects of the Hiroshima nuclear explosion, only 26 percent (153 out of a random sample of 589) of bomb survivors in Hiroshima gave any assistance at all to anybody else after the explosion. Only 5% of people trapped alive by blast debris in Hiroshima were freed by others, while 50% freed themselves before the firestorm took hold. Because British brick houses produce heavier debris than Japanese wooden houses, only 25% of people trapped alive under the stairs or a strong table (Morrison shelter) in collapsed houses after air raids in Britain could free themselves, although the fire risk was lower because bricks do not burn as U.K. Home Office proved. **Organised rescue efforts (see the earlier post, linked here) could therefore increase the survival chance even in demolished wooden buildings substantially.**

For a detailed statistical analysis of the paltry attempt at rescue in Japan, see **Table 6 on p. 101 of Wayne L. Davis, William L. Baker and Donald L. Summers, *Analysis of Japanese Nuclear Casualty Data* (Dirkwood Corporation, Albuquerque, DC-FR-1045, 1966, linked here), based on 35,099 personnel (24,044 in Hiroshima and 11,055 in Nagasaki).** The figure of 5% rescued was a maximum.

**"Case histories collected by investigators in Japan during 1945 illustrate both the effectiveness of shelters and the dangers inherent in apathy of the population, which suffered needless casualties by ignoring air raid warnings. Adequate shelters and immediate response to warnings are essential to survival in nuclear attack." - Francis X. Lynch (Atomic Bomb Unit, Armed Forces Institute of Pathology, Washington, D.C.), "Adequate Shelters and Quick Reaction to Warning: A Key to Civil Defense", *Science*, v142 (1963), pp. 665 - 667.**

In addition, the line-of-sight thermal flash burns casualties and flying glass and debris wounds in Hiroshima could have been averted by simple "duck and cover" if the air raid precautions had been more effective, and if the population was aware of the facts. Even today, propaganda films of nuclear explosions with the blast bang falsely superimposed on the visible flash for dramatic effect or deception, carries the false message that duck and cover is no use because the blast arrives simultaneously with the flash. It does not. Not only was the population of Hiroshima exposed to the bombs, but most people outdoors turned to watch the bomb fall from the B-29, which led to the high incidence of flash burns (70% of injuries and 50% of deaths were due to a synergism between flash burn infections and sub-lethal doses of radiation, according to the U.S. Strategic Bombing Survey *Effects of Atomic Bombs on Health and Medical Services in Hiroshima and Nagasaki*, Pacific War report 13, 1947 and the 1977 *International Symposium on Damage and After Effects of the Atomic Bombing of Hiroshima and Nagasaki*), which were too numerous to be treated, leading to infections which proved lethal in combination with the depressed white blood cell count for a few weeks after >100 R nuclear radiation exposure:

"In the first week after the Hiroshima bombing, burns received no more than ointments and salt-water compresses. Wounds were often not even dressed."

- Drs. Oughterson and Warren, *Medical Effects of the Atomic Bomb in Japan*, McGraw-Hill, New York, 1956, p. 77.

**From the 1940s onwards, a succession of anti-civil defence writers have falsely claimed that Hiroshima type mass burns are inevitable in any nuclear war - regardless of the atmospheric visibility, the type and yield of detonation, the average shielding of the population from a potential fireball - and have usually finished up by listing the immense civilian medical requirements needed to treat a single badly burned petrol soaked casualty in peacetime, who, despite the attention of many doctors and the use of immense quantities of blood plasma and antibiotics, died anyway. Implying falsely that thermal flash burns are like being soaked in petrol and cremated in peacetime and that this failure of immense medical efforts doesn't imply failure of technique, they insist politically that the prevention of injury should be by surrender to terrorists rather than civil defence duck and cover, without examining whether surrendering to terrorists will result in tragedy:**

"A 20-year-old man was recently hospitalized in the burn unit of one of Boston's teaching hospitals after an automobile accident in which the gasoline tank exploded, resulting in extensive third-degree burns. During his hospitalization, he received 281 units of fresh-blood plasma, 147 units of fresh-frozen red blood cells, 37 units of platelets, and 36 units of albumin. He underwent six operative procedures, during which wounds involving 85% of his body surface were closed with homograft, cadaver allograft and artificial skin. Throughout his hospitalization, he required mechanical ventilation and monitoring with central venous lines, arterial lines, and an intermittent pulmonary artery line. Despite these heroic [sic.] measures, which stretched the resources of one of the country's most comprehensive medical institutions [using resources that could have been used for other people], he died on his 33rd hospital day. His injuries were likened by the person who supervised his care to those described for many of the victims of the atomic bomb exploded over Hiroshima [this incompetent comparison of petrol burns to flash burns probably explains the incompetence of the treatment given and the outcome]."



- Dr Howard Hiatt, Harvard School of Public Health, "Preventing the Last Epidemic", *Journal of the American Medical Association*, vol. 244 (1980), pp. 2314-5.

It should be emphasised here that *not all American medical professionals are so callous towards human life that they promote deceptions for political propaganda*. For example, **Dr Jane M. Orient has denounced pseudo-scientific attacks on civil defense in *The Lancet*, 18 November 1988, pp. 1185-6**, and in an article called *Medical Preparedness for Nuclear War*, [linked here](#) (although the peer-review system, dominated by the groupthink of appeasement, has been used to censor her vital papers from publication in some journals).

Contrary to the American medical propaganda about the civilian medical panic and failure with small numbers of severely burned patients, is a vast improvements in military medical experience of the **treatment of mass burns casualties in combat situations since Hiroshima:**

N. Ben-Hur and H. Soroff, "Combat Burns in the 1973 October War and the Anti-Tank Missile Burn Syndrome", *Burns*, vol. 1, pp. 217-21 (1975).

M. S. Zaki and S. M. Talaat, "Mass Casualties in Burns", *Medical Journal of Cairo University*, Vol. 44, IV (1976).

**B. Sørensen, "Management of Burns Occurring as Mass Casualties after Nuclear Explosion", *Burns*, vol. 6, pp. 33-6 (1979), which gives data from a burns unit showing that people with less than 40% body area burns can usually be successfully treated for lethal shock (flash burns from direct thermal radiation cannot burn larger areas; scattered thermal radiation did not cause burns in Hiroshima or Nagasaki):**

**Anti-shock treatment: During the first 48 hours post burn a quantity of fluid equivalent to 15 per cent of the body weight per 24 hours should be drunk. For every litre of fluid, 5 grams (one teaspoonful) of salt should be consumed.**

- (a) Remove all clothing from burned areas;**
- (b) if possible, hold burned area under cool water for one-half to one hour, then wash with soap and water;**
- (c) leave all burned areas uncovered, i.e. without dressing, ointment etc;**
- (d) do not lie on burned areas;**
- (e) after 48 h or so the burn will be covered by a dry crust. Leave the crust quite alone until it falls off of its own accord (10 to 14 days).**

#### **Lies about thermal radiation causing complete permanent blindness to all**

"They gave out dark glasses that you could watch it with. Dark glasses! Twenty miles away, you couldn't see a damn thing through dark glasses. So I figured the only thing that could really hurt your eyes (bright light can never hurt your eyes) is ultraviolet light. I got behind a truck windshield, because the ultraviolet can't go through glass, so that would be safe, and so I could see the damn thing. Time comes, and this *tremendous* flash out there is so bright that I duck, and I see this purple splotch on the floor of the truck. I said, "That's not it. That's an after-image." So I look back up, and I see this white light changing into yellow and then into orange. Clouds form and disappear again – from the compression and expansion of the shock wave [the Wilson cloud chamber effect]. ... I am about the only guy who actually looked at the damn thing – the first [nuclear] *Trinity* test. Everybody else had dark glasses, and the people at six miles couldn't see it because they were all told to lie on the floor. I'm probably the only guy who saw it with the human eye. Finally, after about a minute and a half, there's suddenly a tremendous noise – BANG, and then a rumble, like thunder – and that's what convinced me. Nobody had said a word during this whole thing. We were all just watching quietly. But this sound released everybody – released me particularly because the solidity of the sound at that distance meant that it had really worked.

"The man standing next to me said, 'What's that?' I said, 'That was the Bomb.' The man was William Laurence. [The only journalist who attended the *Trinity* test, Science Correspondent for the *New York Times*, who forgot that sound travels slower than light, a vitally important fact for duck and cover: people need to know that particularly for the most destructive higher yield explosions, the blast - and thus all sound of the explosion - is delayed long after the flash, over large areas of destruction.]"

**- Professor Richard P. Feynman, "Los Alamos from Below", in his book *Surely You're Joking, Mr. Feynman!*, W. W. Norton Company, Inc., February 1985.**

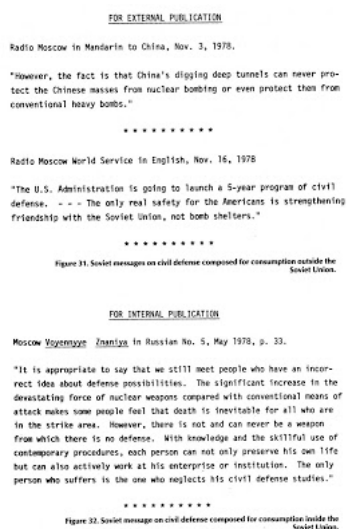
As Glasstone and Dolan point out in *The Effects of Nuclear Weapons*, the eye was not subject to burns like skin was at Hiroshima or Nagasaki. This is because of the natural reflex reaction is for the eyelid to close on seeing a bright flash, just as people blink when a camera flash goes off: any curiosity to look at the fireball is a delayed and different matter to the automatic reflex reaction blink. In order to get retinal burns to rabbits in high yield, low altitude nuclear tests, the eyes had to be cruelly held open with forceps while facing the fireball, to prevent the automatic blink reflex from cutting off the thermal exposure before enough of the thermal pulse energy had been delivered to cause a burn. Eye injuries where survival is possible are limited to burns to the eyelids if the person does not duck and cover, and relatively small burns equal in size to the fireball image on the retina at the back of the eye. This is a small size where survival is possible for people with an unobstructed line-of-sight of the fireball, so these retinal burns are of limited consequence. Jonathan Schell (a staff writer for *The New Yorker*) had to tell falsehoods, developing a confused fantasy of gross deception about retinal burns, after claiming to use Glasstone and Dolan's *Effects of Nuclear Weapons* as a source in his book *The Fate of the Earth* (Pan Books, London, 1982, p. 53):

"People hundreds of miles away [after a 20 Mt surface burst on New York] who looked at the burst would be temporarily blinded and would risk permanent eye injury. (After the test of a 15 Mt bomb in Bikini Atoll, in the South Pacific, in March of 1954, small animals were found to have suffered retinal burns at a distance of 345 miles.)"

This concentrates falsehoods: (1) even in a vacuum with no atmospheric attenuation, the fireball image on the retina would be a trivial area at large distances! (2) The 15 Mt *Bravo* surface burst test in March 1954 was detonated just 80 miles from totally unprotected islanders at Ailinginae Atoll, there was no possibility of eye injury. (3) Bikini Atoll is in the North Pacific, not the South Pacific. (4) The only test which produced the eye injuries at 345 statute miles was *Teak*, a high altitude burst which had already been exaggerated and had the exaggeration debunked in the March 1963 issue of the *Bulletin of the Atomic Scientists*:

“During the *Teak* shot [of 3.8 Mt yield, 77 km altitude over Johnston Island, 1958, rabbits received retinal burns] lesions ... approximately 2 mm in diameter at about 40 miles, but only 0.5 mm at 300 miles [U.S. Congress, Joint Committee on Atomic Energy, Special Subcommittee on Radiation, 22-26 June 1959 hearings on the *Biological and Environmental Effects of Nuclear War*, pp. 248-50]. These results have been interpreted as implying that everyone caught in the open within hundreds of miles of a nuclear detonation would be instantly and permanently blinded. Nothing could be further from the truth. As a matter of fact, chances of finding a large number of cases of retinal burns are extremely unlikely, and since only the more serious burns centrally located in the visual field produce a loss of visual acuity, cases involving a considerable loss of vision will be even more rare. The animals used in the *Teak* experiments had been dark-adapted [so their pupils had expanded to the maximum size, allowing in a maximum amount of light]. They were oriented so as to be looking at the fireball. The altitude of the detonation maximized the fireball dimensions and minimized the duration of delivery of the thermal pulse to a time short compared to the blink reflex time of either rabbit or man. ... The second *Hardtack* high altitude burst, called *Orange* [3.8 Mt at 43 km altitude over Johnston Island], produced no thermal radiation effects [due to atmospheric shielding] because of cloud cover that existed at detonation time.”

- Dr Abraham Brodov, “Surviving Fire Effects of Nuclear Detonations”, *Bulletin of the Atomic Scientists*, March 1963, pp. 20-3.



**Above:** Soviet Union propaganda on civil defence simultaneously said civil defence was useless when broadcasting outside the Soviet Union, while saying the *exact opposite* in internal broadcasts. Source: John Dowling and Evans M. Harrell, *Civil Defense: a Choice of Disasters* (American Institute of Physics, New York, 1987, p. 195; we will discuss this book in detail below after Stonier's book).

### Should we protect ourselves from nuclear weapon effects?

The title above is that of Oak Ridge National Laboratory nuclear effects physicist Carsten M. Haaland in Appendix B to the book edited by Professors John Dowling and Evans M. Harrell, *Civil Defense: a Choice of Disasters* (American Institute of Physics, New York, 1987; the book is a symposium proceeding of a study group of the Forum on Physics and Society of the AIP), which puts the civil defense case quite clearly as we shall see. This blog post reviews that book, along with *Nuclear Attack: Civil Defence, a Symposium compiled and edited by the Royal United Services Institute for Defense Studies* (Brassey's, Oxford, 1982), and Dr Thomas Stonier's 1964 book *Nuclear Disaster* which is the best researched (yet still defective) of the attacks on civil defence.

### THERE IS AND ALWAYS HAS BEEN A BROAD SPECTRUM OF THREAT SCENARIOS, NOT JUST THE WORST CASE, AND EVEN THE MOST EVIL PEOPLE IN HISTORY HAVE BEEN INTIMIDATED INTO RESTRAINT

Hitler was appeased while he was rearming Germany faster than Britain was rearming in the 1930s, on the false beliefs that:

(1) **Every ton of TNT bombs would kill well over 100 people, as in two surprise air raids on an unprepared England with no civil defence in 1917.** *Rebuttal:* civil defence in England by 1942 had reduced this to 4 fatalities per ton of bombs dropped, equivalent to 40,000 killed by a single 20 kiloton explosion,  $4(20,000)^{2/3} = 2,900$ . Without civil defence, there could be 74,000 killed by a 20 kiloton bomb, because  $100(20,000)^{2/3} = 74,000$ . (Above 20 kilotons, the  $2/3$  power of yield scaling for blast damage areas and casualty rates has two opposing modifications. Firstly, as Lord Penney discovered in Hiroshima and Nagasaki, over very large distances the cumulative depletion of blast energy in causing damage to successive houses in any radial line becomes substantial and reduces the blast pressure, reducing the scaled damage distances for larger weapons. Secondly, the blast duration is longer for larger weapons, so the wind pressure loading becomes important for many types of buildings in the megaton range, increasing damage. These rough scaling calculations ignore the effects of blast energy partition, height of burst, population density variation, etc.)

(2) **Persistent mustard gas would be dropped on civilian targets as the war escalated, preventing civil defence rescue efforts!** *Rebuttal:* the Nazis were extremely evil, but that didn't make the war escalate to uncontrolled use of weapons of mass destruction, especially since Britain had more gas masks by 1939 than Germany, despite having a smaller stockpile of gas bombs. Like radioactive fallout, gas warfare was militarily unattractive for use as a weapon compared to blast,

because of uncertainties in weather prediction (wind and rain). Incendiary bombs only proved more effective than high explosives against old city areas filled with highly inflammable wooden buildings, which no longer exist in modern cities.

(3) **The war would be an all-out event, with every high explosive, incendiary and persistent mustard gas bomb the Nazis had dropped on England as rapidly as possible, creating firestorms and leaving blasted, contaminated rubble.** If people didn't die in the blast from high explosives, they would be burned in the firestorm from the incendiaries. Any few who survived blast and fire would envy the dead, while they died slow and lingering deaths from skin blisters and lungs choking with fluid after the inhalation of toxic, blistering mustard gas. ***Rebuttal: this belief was widely held as a "common sense" extrapolation of first world war techniques to aerial bombardment against cities, but it was an extremely unlikely "worse case" scenario with low probability (why should an enemy gamble all their bombs in one "all-out" attack and then be left with no reserve in case the attack fails from unexpected defenses, bad weather, etc., escalating the war with devastating tit-for-tat retaliation?), which was falsely promoted as being certain due to tit-for-tat escalation in war, in order to "justify" appeasing terrorists.***

All three illusions apply to nuclear weapons effects exaggerations: by exaggerating the size of the bombs, the weight of the attack, the way in which weapons would be used, the targetting policy, etc., you can create a "doomsday scenario", and then brainwash yourself and fellow travellers that your worst-case scenario is the "only realistic" situation, and use it to preach the doctrine that the Nazis, Communists or other dictatorial terrorist states must be appeased and surrendered to, "in order to preserve life on Earth". This is exactly what the terrorists want to achieve. Fear. Intimidation. Surrender through terror.

On the contrary, chapter 12 of Glasstone and Dolan's 1977 *Effects of Nuclear Weapons* states that the median lethal distance outdoors in Hiroshima was 1.3 miles, while in reinforced concrete buildings it was 0.12 mile, so the difference in lethal areas was a factor of  $(1.3/0.12)^2 = 120$ . Civil defence air raid precautions to take cover in reinforced concrete buildings would therefore have had a major benefit in Hiroshima. Even ducking and covering in the open reduced mortality to 100 days in Hiroshima by a large factor, due to shadowing and thus reducing or avoiding serious heat flash burns, as is clear from the table on page 103 of Drs. Oughterson and Warren's 1956 *Medical Effects of the Atomic Bomb in Japan* (McGraw-Hill, New York).

In his 1960 book *On Thermonuclear War* strategist Herman Kahn explained:

'... some experts insist on talking as if the only choices were immediate surrender, immediate preventative war, or eventual world annihilation. *This is certainly not the case now and, with luck and skill, never will be the case.*'

Kahn argued that civil defence was another choice: having civil defence first shows that you are not bluffing with your nuclear deterrent, and are not completely unprepared to defend liberty, and secondly gives you countermeasures to mitigate the effects of terrorism. An absence of civil defence encouraged the secret rearmament of fascist states in the 1930s. America, Russia, and Britain all built their first nuclear weapons in secret. Disarmament and a lack of civil defence led to a false sense of security in the 1930s. Being weak does not prevent intimidation, rather it encourages terrorists to secretly arm and then intimidate:

"How horrible, fantastic, incredible it is that we should be digging trenches and trying on gas masks here because of a quarrel in a far away country, between people of whom we know nothing."

- Prime Minister Neville Chamberlain, address to the British public after his meeting with Hitler at Munich after the Nazi invasion of Czechoslovakia, 27 September 1938.

"After the Munich agreement, the Labour Party were relieved that we had escaped the war. Now [there is war] they want to know why we did not call Hitler's bluff. If we get through this war successfully, then it will be to Munich that we shall owe it. In the condition our armaments were in at that time, if we had called Hitler's bluff and he had called ours, I do not think we could have survived a week [this was a civil defence issue, since Hitler had too few long range bombers to attack Britain successfully in 1938, but was arming faster than Britain was, so the situation was getting worse: Britain was getting into a worse position, not "buying time" as Chamberlain's excuse claimed]."

- Neville Chamberlain (who as British Prime Minister flew and met Hitler twice, gaining useless "peace agreements" signed by Hitler on worthless pieces of paper, ditching Czechoslovakia to the Nazis in the process, which gave them immense mineral and industrial war making resources for them to arm way faster than Britain), arrogant excuse for appeasement to the National Union in 1940.

"If a potential aggressor sees that the object nation, whilst posing an ability to give as good as it gets, has taken no civil protective measures at all against the possibility of attack, then the credibility of that nation's deterrent posture will be low. The aggressor will be tempted to assume that its armed forces, conventional or nuclear, are no more than a costly bluff by a country that never intends to fight for its survival if need be. Political and military pressure may be exerted on it without fear and without limit, and its position will be at grave risk. But if, on the other hand, such a nation is seen to have taken in time of peace positive Civil Defence measures in anticipation of attack, then the credibility of its deterrent posture will be enhanced ..."

- Air Marshal Sir Leslie Mavor (1916-91), Principal of the Home Office Home Defence College, Easingwold 1973-80, Introduction to *Nuclear Attack: Civil Defence, a Symposium compiled and edited by the Royal United Services Institute for Defense Studies* (Brassey's, Oxford, 1982), p. 4.

The "disarm and surrender to avoid war" strategy of unilateral disarmament organisations like CND (Campaign for Nuclear Disarmament) led them to tactics like attacking civil defence as useless, by only considering a fraudulently exaggerated attack scenario which would overwhelm practical civil defence preparations (ignoring the lesson of 1930s threat exaggerations). So CND ignored the broad spectrum of risks, ranging from collateral damage from EMP or fallout being blown across the

country from a nuclear conflict in a nearby country, to conventional high explosive, gas bombs or small nuclear weapons dropped on a limited number of either military or political targets. World War II never escalated from high explosive to mustard gas bombing, not *despite* the fears and preparations like gas masks in the late 1930s, but *because* of those preparations. *Civil defence precautions for a gas attack helped prevent WWII from escalating to gas bombing raids.*

“Civil defense, as an element of the strategic balance, should assist in maintaining perceptions of that balance favorable to the U.S.”

- President James E. Carter, Presidential Directive 41, September 1978.

“The foreign policy of the United States should reflect a national strategy of peace through strength. The general principles and goals of this strategy would be: ... to create a strategic and civil defense which would protect the American people against nuclear war at least as well as the Soviet population is protected. [Third of eight goals.] ... since 1977, the United States has moved from essential equivalence to inferiority in strategic nuclear forces with the Soviet Union. ... We reject the mutual-assured-destruction (MAD) strategy of the Carter Administration which limits the President during crises to a Hobson's choice between mass mutual suicide and surrender.”

- Ronald Reagan's 1980 Republican party election platform, quoted by Robert Scheer, *With Enough Shovels: Reagan, Bush and Nuclear War*, Secker and Warburg, London, 1983, pp. 127-8.

High energy physicist Dr John Hassard, the biggest civil defence critic contributor in the Dowling and Harrell AIP book, was director of the “Physicians for Social Responsibility Task Force on Nuclear War Evacuation” and at the time of writing in 1987 was a member of the Washington, D.C. (not Moscow) based “American Committee for East-West Accord”. Backing up Reagan's attempt to end the arms race by bankrupting a expansive totalitarian dictatorship by an arms race was generally considered foolish and dangerous, so many people behaved towards the Soviet Union exactly as the appeasers behaved in the 1930s: they believed that civil defence against the threat of bombing from Hitler was dangerous, would provoke war or cause Hitler to simply increase the size of the bombing attack, negating civil defence. They chose to see any civil defence effort as increasing the danger.

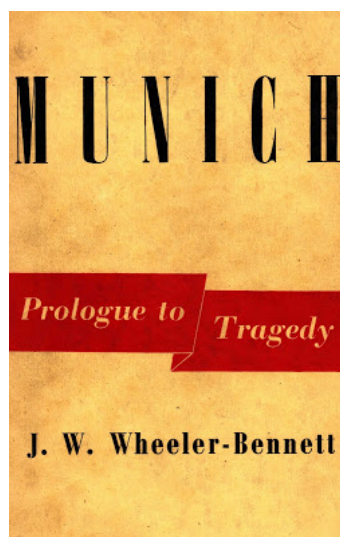
Hassard writes on page 99: “From a purely pragmatic point of view, it could be added here that a population in cars, trains, and buses is far more vulnerable to the direct effects of nuclear weapons than it would otherwise be.”

In fact, people can duck and cover against thermal radiation and flying debris wherever they are, so the benefit gained from distance (due to the rapid fall in both hazardous radiation and blast with increasing distance) soon exceeds the protective factor of staying under cover in a target area. The evacuation of women and children from British cities prior to the declaration of war in 1939 did not provoke a Nazi attack on the evacuating population; the attacking force would have found it more difficult to target such a dispersing, distributed evacuating population, than “sitting ducks”.

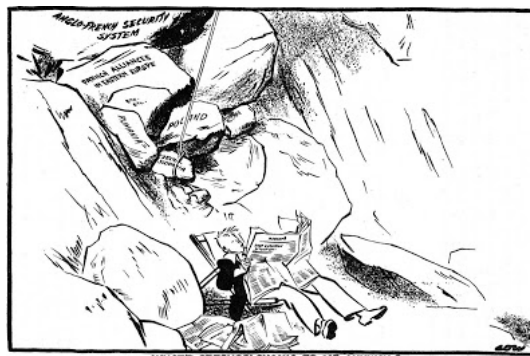
Hassard on page 164 also claimed that the lifeboat analogy to civil defence was misleading because nuclear confrontations can be controlled, unlike “icebergs in the night”. This is wrong because he is ignoring the fact the *Titanic* did of course try to avoid the iceberg, and by steering it minimised the impact damage and gave time to lower the lifeboats! It was the panic and lack of drill that led to so many deaths, not a lack of effort to avoid hitting the iceberg. Hassard then makes the false claim that civil defence is like a lifeboat that will not float, although on pages 91-101 he gives some facts suggesting the opposite:

“In 1961, for hurricane Carla, for example, between 1/2 and 3/4 of a million people were evacuated without a single major reported accident or fatality. [Mattie E. Treatwell, *Hurricane Carla, September 3-4, 1961*, Office of Civil Defence, Denton, Texas, 1961; Hearings of the Senate Committee on Banking, Housing and urban Affairs, 95th Congress, 2nd Session, January 1979.] ... President Reagan has even used nuclear winter as an argument in favor of his strategic defense initiative [to reduce the scale of nuclear disaster by intercepting some warheads, making civil defence more effective] ... Ultimately, the most lasting impact of the discovery of nuclear winter may be an acceleration into research and development of very low yield (one or two kiloton) weapons, capable of earth penetration, and accurate enough to hit individually specified buildings. [Which reduces the collateral damage and makes civil defence more effective.]”

#### Controversy and democratic liberty







WHAT'S CZECHOSLOVAKIA TO ME, ANYWAY?  
JULY 18, 1938  
By courtesy of Mr. David Low and the "Evening Standard"



WHAT, NO CHAIR FOR ME?  
SEPTEMBER 19, 1938  
By courtesy of Mr. David Low and the "Evening Standard"



"IF THE BRITISH DON'T, MAYBE WE WILL"  
JUNE 29, 1939  
By courtesy of Mr. David Low and the "Evening Standard"

**Above: Hitler's exaggerated threat against Britain put pressure on the British Government to coerce the man behind these newspaper cartoons, David Low, to stop:**

Lord Halifax contacted the manager of the Evening Standard to see if Low could be toned down. He said:

"You cannot imagine the frenzy that these cartoons cause. As soon as a copy of the Evening Standard arrives, it is pounced on for Low's cartoon, and if it is of Hitler, as it generally is, telephones buzz, tempers rise, fevers mount, and the whole governmental system of Germany is in uproar. It has hardly subsided before the next one arrives. We in England can't understand the violence of the reaction."

It wasn't only Hitler complaining about Low. In 1938 Prime Minister Neville Chamberlain singled out Low while appealing to newspapers to temper their critical commentary of Germany. Chamberlain said:

"Such criticism might do a great deal to embitter relations when we on our side are trying to improve them. German Nazis have been particularly annoyed by criticisms in the British press, and especially by cartoons. The bitter cartoons of Low of the Evening Standard have been a frequent source of complaint."

**John A. Wheeler-Bennett's** brilliant first-hand history, *Munich: Prologue to Tragedy* (Macmillan, London, 1948), which was used by Herman Kahn in the RAND Corporation studies of dealing with dictatorship using civil defense to increase the credibility of deterrence, tells on pages 197-9 how he (Wheeler-Bennett) and two friends raised £318,000 for Jewish and other refugees from the Nazi invasion of Czechoslovakia due to Prime Minister Chamberlain's concession to Hitler, and flew to Czechoslovakia to try to save as many as possible from Nazi persecution (their aircraft was blown up by a time bomb on the next flight, killing all aboard):

"Much sympathy had been aroused in Britain by the sorry plight of the refugees who had fled the Sudetenland [of Czechoslovakia] before the advance of the German occupying forces. With vivid memories of what had happened in Germany and in Austria to those who, by reason of race, nationality or political creed, had found themselves in opposition to the principles of the Third Reich, thousands of Czechs, as well as Jews ... had fled from their homes ... In response to a letter to *The Times*, signed by Major-General Sir Neill Malcolm, at that time League of Nations High Commissioner for Refugees,



Viscount Duncannon and myself [*The Times*, 4 October 1938], the Lord Mayor of London, Sir Harry Twyford, opened a Mansion House Fund for the relief of these unfortunate people ... The Lord Mayor wished to superintend personally the setting-up of a committee for the distribution of these funds, and, accompanied by Sir Neill Malcolm and myself, he flew to Prague on October 10. On arrival we found that the situation was even worse than we had anticipated. ... Such is the story of the Munich Agreement, the great humiliation of the Western democracies ...

"... The best that could have been said for it was that, though irretrievable in itself, it had at least gained - at a terrible price - a breathing-space in which Britain and France might prepare, materially and spiritually, for the forthcoming and inevitable conflict. Had this been true, the Czechs would not have been sacrificed in vain. In fact, however, Munich only stands as a milestone between the years the locusts had eaten and the months which they were about to devour [Chamberlain was still deluded, and Britain was only rearming at a small fraction of the rate that Germany was, so every day Britain's differential situation was getting worse, not better]."

Wheeler-Bennett researched this book while editing for publication the official German foreign policy documents captured in the war, and while writing the history of the Nuremberg trials. He points out on page 16 of *Munich: Prologue to Tragedy* that Chamberlain's delusions about Hitler were childish, like any negotiations with terrorist thugs:

"There is something tragically hideous and pathetic in this belief of Mr Chamberlain that he could match wits and exchange truths with Hitler, who, only shortly before, is reported to have confessed that 'he was ready to guarantee every frontier and to conclude a non-aggression pact with anyone,' but that 'anyone who was so fussy that he had to consult his own conscience about whether he could keep a pact, whatever that pact or whatever the situation, was a fool. He could conclude any pact and yet be ready to break it next day in cold blood, if that was in the interests of Germany'."

Describing the prelude to the Munich meeting between Prime Minister Chamberlain and Chancellor Hitler on 22 September 1938, Wheeler-Bennett tells on page 129 how the British Ambassador told Chamberlain of the following threat he received from **Field-Marshal Hermann Göring** the previous week:

"If England makes war on Germany, no one knows what the ultimate end will be. But one thing is quite certain. Before the war is over there will be very few Czechs left alive and little of London left standing."

Chamberlain had previously met Hitler at Berchtesgaden where Hitler had laid out his demands. At Munich Chamberlain now informed Hitler that he had conceded everything. Hitler was taken aback by the level of appeasement, then he quickly upped his demands (Wheeler-Bennett, pp. 132-3):

"... when Mr Chamberlain ... looked confidently down the green baize-covered board-room table for the Führer's reactions, there was a moment of incredulous silence. Then, to crystallize the matter, Hitler asked directly: 'Do I understand that the British, French, and Czechoslovak Governments have agreed to the transfer of the Sudetenland from Czechoslovakia to Germany?' 'Yes,' replied the Prime Minister. There was another pause, a longer one this time, and then the Führer replied incisively: 'I am extremely sorry, but that's no longer of any use' (*Es tut mir fürchtbar leid, aber das geht mir nicht mehr*)."

When offered an inch, Hitler would take one mile. That was his *modus operandi*: **'In March 1938 Henlein, referring to the government in Prague, told Hitler: "We must always demand so much that we can never be satisfied".'** Offered all he wanted by Chamberlain at Munich, Hitler struggled to quickly come up with still further demands, but succeeded. Chamberlain was shocked that Hitler suddenly increased the demands from those made to his face at Berchtesgaden. It was the thin end of the wedge, and Hitler arranged his meeting with Chamberlain to involve constant explosions of temper (Wheeler-Bennett, page 133):

"A debate of some acrimony followed, Hitler reiterating the failure of the Anglo-French Plan to meet the new contingencies, Mr Chamberlain refusing to accept the new German proposals. During this time the Prime Minister was treated to a typical example both of the Führer's theatre-craft and of his temperamental nature. In the course of the discussion they were frequently disturbed by couriers who handed urgent despatches to Hitler. These the Führer would scan swiftly, and then, his face contorted with rage, would shout: 'Two more Germans killed by the Czechs; I will be avenged for every one of them. The Czechs must be annihilated'. At length, after three hours, and many repetitions of this scene, Mr Chamberlain withdrew, 'full of foreboding', but not before he had exacted from Hitler an extension of his assurance that he would not move his troops into Czechoslovakia while the negotiations continued, a concession which it was easy for the Führer to make since the zero hour for 'Operation Green' [the invasion] had not yet arrived."

Chamberlain conceded to Hitler, explaining the reasons in a pacifist broadcast:

"However much we may sympathize with a small nation confronted by a big and powerful neighbour, we cannot in all circumstances undertake to involve the whole British Empire in a war simply on her account. If we have to fight it must be on larger issues than that. I am myself a man of peace to the very depths of my soul. Armed conflict between nations is a nightmare to me; but, if I were convinced that any nation had made up its mind to dominate the world by fear of force, I should feel that it must be resisted." (Wheeler-Bennett, page 158; this appeasing broadcast by Chamberlain was published in *The Times*, 27 September 1938.)

This statement proves that *Chamberlain did not believe that Hitler was a megalomaniac threat, even after meeting him twice and having to concede the*

*Sudetenland of Czechoslovakia to him at Munich in 1938.* Chamberlain was not buying time for rearmament. He knew that by giving Hitler the Sudetenland he was handing Hitler 70% of Czech iron and steel, 86% of her chemical resources, 70% of her electric power, and so on, which would be used for arms production. He knew he was making Britain's position relative to the Nazis worse, not buying time for rearmament (although after he had to declare war, Chamberlain deceived himself that he had always done the right thing, because he thought any efforts for peace were morally unassailable by definition). Chamberlain as an egotistic politician flattered himself that he could negotiate tyranny without being deceived:

"The truth is that Mr Chamberlain had developed as blind a confidence in his political intuition as ever as ever the Führer subsequently achieved, and his faith in his own influence with Hitler was as great. 'You see,' he is said to have replied to one of his Cabinet colleagues who had pointed out to him that Hitler had made promises in the past and broken them, 'you see, my dear fellow, this time it is different; this time he has made the promises to me'." (Wheeler-Bennett, p. 182.)

Wheeler-Bennett points out on page 216 that Chamberlain had no excuse for this self-deception because Hitler had published a full explanation of his belief in political lies for propaganda in *Mein Kampf* back in 1926, first published in English in 1933, where Hitler wrote that big lies are more likely to be believed by the average person than small ones: "it is more readily captured by a big lie than a small one. ... even from the most impudent lie something will always stick."

At the time of Munich in 1938, Britain did not have the civil defence preparations ready for a war so Chamberlain was unable to make any credible threat:

"In these days, too, began the somewhat futile process of 'fitting' the population for gas-masks, which were only to be distributed 'in emergency' and, in any case, were virtually non-existent." (Wheeler-Bennett, page 159; in a footnote he states that M. Bonnet received a request for a million gas masks for France during the Munich discussions of 25-26 September, but was unable to help because Britain at that time only had enough for the population of London, with none spare for the rest of the country, let alone France. He mentions that this lack of civil defence during the Munich crisis caused one third of the population of Paris to flee the city in panic.)

After the Munich agreement had prevented war in 1938, criticisms of Chamberlain began in the 3 October 1938 House of Commons Debate, where Duff Cooper stated:

"It was not for Serbia that we fought in 1914. It was not even for Belgium, although it occasionally suited some people to say so. We were fighting then, as we should have been fighting last week, in order that one Great Power should not be allowed, in disregard of treaty obligations, of the laws of nations and the decrees of morality, to dominate by brutal force the continent of Europe." (Wheeler-Bennett, p. 186; Hansard, House of Commons Debates, 3 October 1938, column 32.)

Richard Law added dry humour to that debate (Wheeler-Bennett, p. 186; Hansard column 114):

"We have now obtained, by peaceful means, what we have fought four wars to prevent from happening, namely, the domination of Europe by a single power."

Prime Minister Chamberlain closed the debate by declaring laconically:

"Our policy of appeasement ... is to obtain the collaboration of all nations, not excluding the totalitarian States, in building up a lasting peace for Europe." (Wheeler-Bennett, p. 189; House of Commons, 3 October 1938.)

Churchill took longer to respond, but on 5 October 1938 he told the House of Commons:

"This is the consequence of five years of futile good intention; five years of eager search for the line of least resistance; five years of uninterrupted retreat of British power; five years of neglect of air defenses. We have been reduced in those five years from a position of security so overwhelming and so unchallengeable that we never cared to think about it. We have been reduced from a position where the very word 'war' was considered one which would be used only by persons qualifying for a lunatic asylum."

This is what the policy of "peace through disarmament" brings you: vulnerability, the encouragement of terrorism, the inability to defend liberty in other countries. Without American lend-lease, Britain would have certainly have lost its liberty to the Nazis in World War II, due to appeasers like Chamberlain and Baldwin. All the time the appeasement was going on, Germany was arming faster than Britain. Still today, **Chamberlain's "buying time" lie of 1940 persists in arms control delusion literature:**

"Scholars typically define appeasement as a policy of satisfying grievances through one-sided concessions to avoid war for the foreseeable future and, therefore, as an alternative to balancing. They traditionally interpret British appeasement of Adolf Hitler in the 1930s as a naïve attempt to maintain peace

with Germany by satisfying his grievances. The standard conceptualization of appeasement and the empirical treatment of the 1930s, however, are theoretically limiting and historically incorrect. Appeasement is a strategy of sustained, asymmetrical concessions with the aim of avoiding war, at least in the short term. There are three distinct variations of appeasement: (1) resolving grievances (to avoid war for the foreseeable future); (2) diffusing secondary threats (to focus on a greater threat); and (3) buying time (to rearm and/or secure allies against the current threat). British appeasement was primarily a strategy of buying time for rearmament against Germany. British leaders understood the Nazi menace and did not expect that appeasement would avoid an eventual war with Germany. They believed that by the time of the Rhineland crisis of 1936 the balance of power had already shifted in Germany's favor, but that British rearmament would work to reverse the balance by the end of the decade. Appeasement was a strategy to delay an expected confrontation with Germany until the military balance was more favorable."

**- Professors Norrin M. Ripsman and Jack S. Levy, "Wishful Thinking or Buying Time? The Logic of British Appeasement in the 1930s", *International Security*, Fall 2008, vol. 33, No. 2, pp. 148-181.**

Contrast that to Kahn, who is not blinded by bias from Chamberlain's lies:

"... in spite of the tremendous scale of the violations it still took the Germans five years, from January 1933 when Hitler came in to around January 1938, before they had an army capable of standing up against the French and the British. At any time during that five-year period if the British and the French had had the will, they probably could have stopped the German rearmament program. This ... makes me feel that the treaty provisions were as successful as one had a right to expect. ... it is an important defect of 'arms control' agreements that the punishment or correction of even outright violation is not done automatically ... but takes an act of will by policy level people in the nonviolating governments ... one of the most important aspects of the interwar period [was] the enormous and almost uncontrollable impulse toward disarmament ... there developed an enormous impulse to remove this disease or at least its manifestations. As late as 1934, after Hitler had been in power for almost a year and a half, [British Prime Minister] Ramsey MacDonald still continued to urge the French that they should disarm themselves by reducing their army by 50 per cent, and their air force by 75 per cent.

"In effect, MacDonald and his supporters urged one of the least aggressive nations in Europe to disarm itself to a level equal with their potential attackers, the Germans. ... *Probably as much as any other single group I think that these men of good will can be charged with causing World War II.* [Emphasis by Herman Kahn.] ... It is ... one thing to fear and detest an evil [war] and quite a different thing to ignore all of the realistic aspects of the problem [the need to actually prevent war not by utopian, worthless treaties with thugs, but instead by means of exerting force against thugs to curtail their power before their capability becomes too great to safely oppose]. ... Hitler came into power in January 1933 and almost immediately Germany began to rearm ... but it was not until October 14, 1933 [that] Germany withdrew from a disarmament conference and the League of Nations ... Hitler's advisors seem to have been greatly worried that this action might trigger off a violent counteraction - for example, a French occupation of the Ruhr. But the British and the French contented themselves with denouncing the action."

- Herman Kahn, *On Thermonuclear War*, Princeton University Press, 1960, pp. 390-1.

First, despite the resources acquired by invasions, Nazi Germany only had a 6-weeks supply of munitions in September 1938, and the position of France was actually deteriorating relative to Germany: in other words, France should have acted rather than delayed since German armament was occurring faster than French armament. Furthermore, the combined naval power of France and Britain in September 1938 still outweighed that of Germany; their relative weakness to Germany then was only in air power.

France then had 1,454 aircraft, Britain 1,550, but the German Luftwaffe had 3,356, although these were mainly tactical, short-range aircraft incapable of reaching Britain from Germany, and Britain's Thames Estuary was already protected by a revolutionary, secret radar-guided air defense system. These figures are from Appendix B of Stephen Roskill's *Hankey, Man of Secrets, 1931-1963*, Vol. III (Collins, London, 1974). For example, 3,356 German aircraft is the actual number at the time of Chamberlain's appeasement at Munich, contrasted to the A. I. Sitrep British intelligence report for 31 August 1938 (available to Chamberlain as Prime Minister at that time) which estimated a threat of only 2,650 German aircraft.

Hence, the intelligence information on the German threat which Chamberlain actually had available was *even more favorable to the suggestion that Hitler could have been resisted at that time, than the situation as we now know it*. Germany had acquired many resources from its invasions, but in September 1938 it was still short of vital military resources such as oil and rubber. It was militarily prepared with only a 6-week munitions supply for a series of invasions, not to fight a World War! In August 1939, just before warfare started, Germany, Italy, France and Britain actually had 4,210, 1,531, 1,234, and 1,750 aircraft, respectively (source: Anthony P. Adamthwaite, *The Making of the Second World War*, George Allen and Unwin, London, 2nd ed., 1979, pp. 227-8). Hence, the appeasement at Munich in delaying the war gave a *bigger advantage to the Nazis than to anyone else*.

"[Just like the Soviet Union during its expansion] At no time did Hitler threaten to initiate war against France and England. He simply threatened to 'retaliate' if they attacked him. The Munich crisis had an incredible sequel in March 1939. ... Hitler occupied the rest of Czechoslovakia. The technique he used is such an obvious prototype for a future aggressor armed with H-bombs that it is of extreme value to all who are concerned with the problem of maintaining a peaceful and secure world ..."

- Herman Kahn, *On Thermonuclear War*, Princeton University Press, 1960, p. 403.

"The new appeasement was a mood of fear, Hobbesian in its insistence upon swallowing the bad in order to preserve some remnant of the good, pessimistic in its belief that Nazism was there to stay and, however horrible it might be, should be accepted as a way of life with which Britain ought to deal."

### The appeasement and disarmament lies of Neville Chamberlain and Edward Grey

The big lies of Chamberlain and Grey are both extremely important to all discussion of arms control, and **we have dealt with them in earlier posts (e.g., the link [here](#)):**

(1) Chamberlain, who met Hitler twice and conceded to his demands repeatedly, lied in 1940 (after appeasement failed and war began) that he had been buying time for British rearmament when he had known all the time knew that his appeasement and concessions to Hitler were allowing Germany to arm faster: Chamberlain told this lie to cover up the incompetence that allowed World War II when he was criticised during his lifetime by books like *Guilty Men*.

(2) Grey, Britain's Foreign Minister in 1914, lied after failing to make Britain's position clear in time to Germany, to cover up his own incompetence that allowed World War I. Grey conveniently blamed weapons, not people, for World War I.

Both of these lies seriously affect the arms control, disarmament, peace and war. This is because the lies of Chamberlain and Grey have been repeatedly used as propaganda. John F. Kennedy, President during the Cuban Missiles Crisis, in his 1940 book *Why England Slept* first focussed on the lie of Edward Grey:

"The statement of Lord Grey, British Foreign Minister [responsible for diplomatic failure], made in 1914, that, 'The enormous growth of armaments in Europe, the sense of insecurity, and fear caused by them; it was these that made war inevitable,' had a tremendous effect on post-war British opinion. Armaments were looked upon as something horrible, as being the cause of war, not a means of defense. ... but England's failure to rearm has not prevented her from becoming engaged in a war; in fact, it may cost her one. The causes of war go deeper than armaments."

- John F. Kennedy (1917-63), *Why England Slept*, Wilfred Funk, Inc., New York, 1940, reprinted by Greenwood, 1981, pp. 6-7.

The lie of Grey is explained by his incompetence in World War I:

**"In 1914, Grey played a key role in the July Crisis leading to the outbreak of World War I. His attempts to mediate the dispute between Austria-Hungary and Serbia by a "Stop in Belgrade" came to nothing, owing to the tepid German response. He also failed to clearly communicate to Germany that a breach of the treaty not merely to respect but to protect the neutrality of Belgium — of which both Britain and Germany were signatories — would cause Britain to declare war against Germany. When he finally did make such communication German forces were already massed at the Belgian border and Helmuth von Moltke convinced Kaiser Wilhelm II it was too late to change the plan of attack. Thus when Germany declared war on France (3 August) and broke the treaty by invading Belgium (4 August), the British Cabinet voted almost unanimously to declare war on August 4, 1914."**

Barbara W. Tuchman's Pulitzer Prize-winning 1962 book, *The Guns of August*, which reportedly influenced Kennedy's handling of the Cuban Missiles Crisis that year, records that Lord Grey on 3 August 1914 obscenely begged Parliament to go to war in order to preserve imperialistic "respect and good name and reputation" and to avoid "economic consequences", with the following words (page 141 of the Four Square edition, London, 1964):

"I ask the House from the point of view of British interests to consider what may be at stake. ... if, in a crisis like this, we run away ... we should, I believe, sacrifice our respect and good name and reputation before the world and should not escape the most serious and grave economic consequences."

This quotation proves that Grey was lying when he claimed: "The enormous growth of armaments in Europe, the sense of insecurity, and fear caused by them; it was these that made war inevitable". Yet, as Kennedy and Kahn pointed out, it was the lie of Grey about arms causing World War I which caused World War II through arms control efforts which led to delusions of achieving security from war through the vulnerability of disarmament for peace, which failed. The lessons are covered up and diligently ignored.

Chamberlain remained Britain's Prime Minister until May 1940 when Churchill took over, retaining Chamberlain in his war cabinet. On 22 September 1940 Chamberlain resigned from the government, and Churchill asked him to accept the Order of the Garter, which he declined. There is little criticism to be made of Chamberlain's service once war had broken out; by contrast Churchill's efforts as First Lord of the Admiralty led to early failures. The issue is purely over Chamberlain's self-deception about Hitler's ambitions during the 1930s which caused the appeasement policy.

**"So far as my personal reputation is concerned, I am not in the least disturbed about it. The letters which I am still receiving in such vast quantities so unanimously dwell on the same point, namely without Munich the war would have been lost and the Empire destroyed in 1938 ... I do not feel the opposite view ... has a chance of survival. Even if nothing further were to be published giving the true inside story of the past two years, I should not fear the historian's verdict." - Chamberlain, November 1940.**

This quotation proves that **Chamberlain was deluded about two things:**

**(a) weapons effects and capabilities: he was deluded about Hitler's air power in 1938, and**

**(b) the fact Britain was losing the arms race during 1938-1940: he was deluded that Britain was in a better position when war came in 1939 than it was in 1938 before Hitler had gained Czechoslovakia.**

MILITARY EXPENDITURE (MILLIONS OF DOLLARS)				
Year	Japan	Germany	Britain	America
1933	183	452	333	570
1934	292	709	540	803
1935	300	1607	646	806
1936	313	2332	892	932
1937	940	3298	1245	1032
1938	1740	7415	1863	1131

Source: A. J. Toynbee and F. T. Ashton-Gwatkin, Editors, *The World in 1939*, London, 1952.

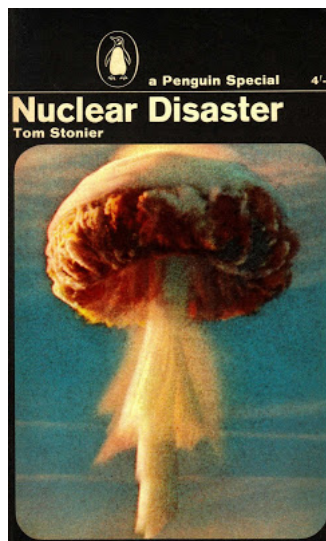
**Above:** as seen in an **earlier post**, Chamberlain's appeasement at Munich in 1938 did NOT buy any time for rearmament whatsoever because GERMANY WAS ARMING MUCH FASTER THAN BRITAIN. Every day, the whole of Germany was working to churn out munitions and train for war, while the efforts in Britain were relatively feeble: Chamberlain knew this, too. Chamberlain was unable and unwilling to engage in an arms race on a par with Germany. Fine, he was representing Britain's pacifist sentiment and doing what the majority of the public wanted, his job as Prime Minister. But this does not excuse his lie that appeasement helped Britain. It made World War II worse, not better, because Germany was arming faster, so any delay was making the situation worse. In 1938, Germany was spending \$20 million a day on its military build up, compared to just \$5 million a day in Britain. Every day, the gap was widening, not decreasing. So, if you want "security through disarmament", study the "little problem" called World War II which was caused by this clever idea.

Before discussing the whole of Stonier's book in detail, the nature of controversy and democratic liberty need to be restated. Many millions fought for liberty, to keep freedom alive by preventing world domination by the suppressive, dictatorial regimes of applied communism and fascism. However, there is always a struggle for facts against false belief systems touted as facts. If there is no freedom to point out errors and to disclose important facts, then liberty is in danger. Hitler didn't single-handedly try to impose a 1,000 year Reich on the world: he had a majority of supporters in 1933. The same goes for Lenin in 1917. **Nuclear weapons effects propaganda against Western civil defence and nuclear arms, stemming from the Kremlin backed Moscow based "World Peace Council" during the Cold War, sought to make any threat of war appear worse than any threat from effective surrender (by unilateral disarmament) to the Soviet Union.**

In a free democracy, popular lying propaganda (or inaccurate, poorly researched claims) must be actively debunked using the facts, or it will gradually infect and corrupt society. People must be prepared to examine and keep reviewing all of the available evidence on any subject. The only sure way to discover error is to *look for error*, to keep trying to apply or test a theory with new data, or new applications. You cannot debunk a false belief if you refuse to examine it critically, on a regular basis. You can't debunk a political opinion, but you can debunk a false "fact".

**A good example is John Charmley's 1999 book *Chamberlain and the Lost Peace*, which glorifies Prime Minister Chamberlain's appeasement of Hitler and claims that Britain should have never declared war on Germany.** Charmley argues that Britain declared war on Germany to save a free Poland, which turned out a failure when the communists invaded Poland, and he adds that the war cost Britain an empire and resulted in the communist domination of half of Europe. However, as Churchill stated the day that war was declared, it was not an imperialistic war to save Poland (any more than World War I was "just" a war of revenge for one assassinated Archduke), but to stop the spread of tyranny. The Cold War arms race was not an abstract conflict of political ideals, but a successful effort to defend personal freedom against the spread of tyranny.

**Nuclear winter and insect plagues in "Nuclear Disaster" 1964 by Dr Tom Stonier**



**Above:** biologist Dr Tom Stonier (b. 1927) published a book called *Nuclear Disaster* in America in 1963, which was revised (with effects on London, in addition to New York) and published in England by Penguin books as a "Penguin Special" in 1964. I will review the 1964 Penguin edition. Including the 19 pages of bibliography (listing 230 references), the book is brief and concise at 240 pages long, and chapter 12, "Ecological Upsets: Climate and Erosion", is the first detailed



prediction of the “nuclear winter” theory, two decades before Sagan and TTAPS. Apart from initiating the “nuclear winter hoax”, chapter 11, “Ecological Upsets: Plants, Insects and Animals” claims that insects will survive gamma radiation, then destroy irradiated plants and spread epidemic plagues (he ignores the effects of beta radiation on insects). He carefully reviews some of Oughterson and Warren’s data on survival in Hiroshima and Nagasaki, **Democrat Chet Holifield’s June 1959 Hearings Before the Special Subcommittee on Radiation, Joint Committee on Atomic Energy, “Biological and Environmental Effects of Nuclear War”**, and many early research reports on the ecological effects of radiation.

But Stonier ignores **Kahn’s argument at those 1959 hearings** that exaggerations of the form of a war in 1938 (where immediate all-out gas and incendiary attacks were wrongly predicted) led to appeasement of the Nazis, he uses inaccurate thermal ignition data from the 1957 and 1962 editions of Glasstone’s *Effects of Nuclear Weapons* (which were not corrected until Glasstone’s 1964 reprint), and he falsely applies firestorm data from old wooden parts of European and Japanese cities to modern brick and concrete buildings. Reviewing Stonier’s book here will show the history of the nuclear weapons effects delusions that led to anti-civil defence film propaganda like “The War Game”. The 1964 Penguin introduction is by Robert Jungk (author of early, Richard Rhodes-style, nuclear age history, *Brighter than a Thousand Suns*), who states:

“Tom Stonier has tried to assemble in comprehensive terms and figures all the available facts about the probable consequences of a nuclear catastrophe. Almost all the material he has used for this sober Apocalypse has been American and almost none European. This is no coincidence. ...”

Jungk claimed that European Governments were not issuing detailed nuclear effects information like America in fear of provoking a public panic and presumably anti-nuclear protests for disarmament, rather than due to habits of secrecy. However, the declassified evidence we have reviewed in the previous posts on this blog show that the secret British reports (including those in the 1960s issues of the restricted British Government journal *Fission Fragments*) debunked popular misconceptions about firestorms from nuclear attack, and other panic provoking nuclear exaggerations. The whole problem for civil defence in the 1960s was that the British civil service knew the facts but had to keep the scientific reports out of the hands of the scientifically illiterate but elected politicians, whose job it was to decide what to publish and what to withhold. Although an unelected army of civil servants effectively constitutes the mechanism of administration of Britain, i.e. the *effective* British Government, it is unable to publish anything without the authority of a small handful of elected M.P.’s who form the quango of power as Cabinet Ministers. These generally scientifically illiterate, biased politicians, don’t have the time or the interest to read and approve scientific reports. In addition, the civil service was quite happy to work in a culture of secrecy and to only issue patronising civil defence orders (lacking scientific justification, which they kept secret) to the public. Hostility towards civil defence in England was not helped by keeping the facts secret. There was no scientific publication of the direct effects of British nuclear tests for civil defence due to secrecy, so with the start of anti-civil defence propaganda, civil defence lost public sympathy and could not defend itself against claims of ineffectiveness. Even Glasstone and Dolan’s *Effects of Nuclear Weapons* frequently presents effects graphs without giving the data points or even showing which nuclear tests they came from; this “trust us” authority-based approach does not always make a big fraction of the public trust civil defence (especially when massive changes had to be made in successive editions, without explaining earlier errors). In a free democracy, unlike a dictatorship, most people naturally expect to see detailed evidence before believing what they are told on such important subjects, or they believe it to be propaganda!

Stonier’s introduction on page 19 notes that the bombing of civilians in World War II stemmed from Giulio Douhet’s Blitzkrieg (lightning war) idea. This is what Hitler used with success in the 1930s: the Nazis prepared for a series of short wars of invasion to spread fascism. On page 20, Stonier notes that in World War I, only 5% of the 9.8 million killed were civilians, but in World War II some 48% of the 52 million killed were civilians, and in the Korean war (1950-3) some 84% of the 9.2 million killed were civilians. He then gives a discussion of the firestorms, ignoring the fact that they were limited to areas of German cities that contained 3-5 storey wooden medieval houses, and wooden Japanese cities.

Chapters 2, 3, 4, 6, 7 and 8 summarise some important data from Oughterson and Warren’s research at Hiroshima and Nagasaki, *Medical Effects of the Atomic Bomb in Japan* (McGraw-Hill, New York, 1956). Stonier, pages 27-8 (based on Oughterson and Warren pages 94 and 102-4):

“In both Hiroshima and Nagasaki, burn injuries constituted the major problem in medical care; from the day after the bombing on, they accounted for more than one-half of all deaths. Twenty days after the attack it was found that among burned survivors the great majority (80-90%) had suffered flash burns, some (5-15%) had suffered both flash and flame burns, a very few (2-3%) had suffered flame burns only. ... At the Hijima High School in Hiroshima, of 51 girls who were outdoors on the school grounds about half a mile from the [ground zero], all were severely burned and died within a week. However, it was found that where there was some shielding [from the line-of-sight of the fireball thermal flash] the number of deaths from flash burns seemed to be reduced significantly.

“At about a mile ... the mortality among [thermal flash line-of-sight] shielded school children was 14.2%, in contrast to 83.7% among unshielded children. Some of the children who were indoors and were thought to have been protected were undoubtedly exposed to the heat rays through doorways and windows [so civil defence could make the protection factor higher, since there was no “duck and cover” in Hiroshima]. ... at Hiroshima’s Kameyama Hospital, 75% of the patients who received burns at 0.6 mile died within two weeks.”

## STONIER ON THE SYNERGISM BETWEEN BURN/DEBRIS WOUNDS AND IRRADIATION

Stonier notes on page 77 that at Hiroshima and Nagasaki the effect of nuclear radiation exposure in suppressing the white blood cell count was important in casualties with concurrent thermal burns or blast injuries (drawing on Oughterson and Warren page 101 and other research into synergism):

“Exposure to radiation can significantly aggravate even minor injuries. ... 100 roentgens ... slows down normal wound-healing processes. The First Military Hospital in Tokyo reported that in those patients who had signs of radiation injury, the healing of wounds was prolonged. The significant point is that small doses of radiation alone are not serious, nor are minor injuries ... But when these two factors are combined, they can cause permanent disability and even death.”

(See also **see the PDF linked here of James W. Brooks et al., “The Influence of External Body Radiation on Mortality from Thermal Burns”, *Annals of Surgery*, vol. 136 (1952), pp. 533–45**, and G. H. Blair et al., “Experimental Study of Effects of Radiation on Wound Healing”, in D. Slome, Editor, *Wound Healing*, Pergamon, N.Y., 1961.)

Stonier notes on pages 77-8 and 94 that Holifield’s June 1959 Congress hearings (pages 12, 847 and 852-3) extrapolating gross casualty data from Hiroshima and Nagasaki up to 1-10 megaton yields, with no civil defence, found a 1,446 megaton attack could kill 28% of the American population (41.8 million of 150.7 million Americans) and injure 11% (17.2 million). The 60% (91 million) of Americans who were uninjured by initial effects were found to receive a mean fallout gamma exposure of 60 roentgens in the first 90 days, the 11% who were injured survivors received 375 roentgens, so 72% of Americans received a mean fallout dose of 110 roentgens.

Stonier's point is that the fallout radiation dose to injured survivors would permit infections of wounds in many cases. On page 107 he writes:

"... dysentery ... was by far the commonest cause of disability [among soldiers] during the American Civil War ... there is evidence that from 5 to 10% of the population of the United States harbours *Entameba histolytica*, the causative organism of amebic dysentery, though without any symptoms [G. W. Anderson and M. G. Arnstein, *Communicable Disease Control*, 3rd ed., Macmillan, New York, 1953, p. 188]. In many of these cases stress on the individual, such as excessive fatigue or malnutrition, may produce a flare-up of the disease. Since radiation is one of the most effective agents known to reduce resistance to infection, it is probable that among an inadequately-cared-for irradiated population there would be outbreaks of intestinal infections."

This is important because existing intestinal bacteria are *not* eradicated by sterile hospital hygiene. Stonier actually underestimates this effect by concentrating on dysentery: in Hiroshima and Nagasaki, all kinds of bacteria we all carry naturally in our mouths, skin, and digestive system were able to proliferate through the body and fatally infect wounds where the radiation exposure suppressed the white blood cell count. *To emphasise, normally harmless bacteria that we all carry turned lethal to burned and blast wounded casualties who received enough nuclear radiation to suppress their immune systems.* It was *not* therefore merely a problem of a lack of sterile hospitals or sterile wound coverings which caused the high mortality from flash burns and glass fragment wounds to irradiated casualties in Hiroshima and Nagasaki: it was a proliferation of normal bacteria in the mouth, skin and gut in the absence of natural countermeasures due to irradiation. The lesson here is to avoid the combination of wounds and irradiation: "duck and cover", even if it failed to reduce nuclear radiation exposure, would avert most of the thermal flash burns and blasted glass fragments and debris wounding mechanisms, preventing Hiroshima's lethal synergism of effects at low radiation doses.

Oughterson and Warren showed that any shadow from the line-of-sight to the fireball prevents thermal flash burns in Hiroshima and Nagasaki, and taking cover to avoid flying glass and debris and bodily displacement by blast winds avoided or minimized blast injuries.

### STONIER'S FIRESTORM DELUSION

Stonier used the thermal ignition data in the June 1957 and April 1962 editions of Glasstone's *Effects of Nuclear Weapons* grossly exaggerated the fire hazard; additionally, the June 1957 edition exaggerated the thermal radiation by fixing the thermal transmission fraction at ~ 0.5 for distances beyond 10 miles! The transmission problem was addressed in the April 1962 revision, but the ignition energy error was not corrected until the February 1964 reprint of Glasstone. Stonier based his analysis on the flawed 1957 thermal effects predictions: 30 cal/cm<sup>2</sup> at 18 miles from a 20 megaton air burst, starting 10 fires per acre. This gives Stonier a total of 2 million fires in the 200,000 acres of New York city if ground zero at Columbus Circle on the island of Manhattan: his use of 30 cal/cm<sup>2</sup> reflects an arm-waving, false attempt to include thermal shadowing of potential ignition points by trees and buildings in the line from fireball to target, as well as the difficulties of making a sustained fire from the ignition of litter like a newspaper. The fire department cannot put that many fires out, a situation similar to the firestorm in Hiroshima which he describes on page 40 (citing pp. 238-41 of Holifield's June 1959 nuclear war hearings, pp. 326-7 of Glasstone and the unclassified 1946 report of the U.S. Strategic Bombing Survey):

"Following the atomic bombing of Hiroshima, the firestorm developed after 20 minutes, achieved its maximum intensity after about 2 hours, and subsided after 6 hours ... 70% of the fire-fighting equipment was crushed in the collapse of firehouses, and 80% of the fire personnel were unable to respond. Although no subsurface pipes were crushed, no leaks resulted directly from the blast, and the water reservoir itself remained undamaged, the water pressure dropped to zero because 70,000 pipe connections in buildings were broken."

On page 80, Stonier summarises the problem in Nagasaki:

"At Nagasaki, the Urakami district was totally without water because of 5 major breaks in buried pipes [due to falling rubble]. 6 additional breaks occurred, 4 of them at bridges, and about 5,000 house-service pipes were broken by the collapse of homes exposed to blast, fire, or both."

After the average yield of individual stockpiled nuclear weapons fell dramatically due to **MIRV** technology in the 1970s, people like Postol began to reduce Stonier's 30 cal/cm<sup>2</sup> firestorm criterion to much lower figures based on the thermal flash exposure at the firestorm radius in Hiroshima. This was done to keep the fire exaggeration business going for smaller yield weapons, but is contrary to all the facts, because in Hiroshima, fires were started primarily - according to the originally secret Strategic Bombing Survey report of 1947 (declassified in 1972) - by the overturning of thousands of charcoal breakfast cooking braziers inside wooden houses filled with inflammable bamboo furnishings and paper screens! Secondary fires due to blast effects on electrical and gas supplies in modern cities are averted by modern circuit breakers and gas cut-off valves. Additionally, in a surface or low altitude burst, the intense radial - not radiated - EMP due to charge separation would induce kiloamp cable currents as in Nevada tower tests, which would race out at the velocity of light and trip circuit breakers, thus cutting off electrical power, before the blast wave arrived, preventing most secondary fires. The few fires in Hiroshima from thermal flash ignition were observed to start in black coloured air raid curtains in wooden houses.

Unlike the black air raid blackout curtains in Hiroshima, the side of curtains facing the outside in cities are now usually light colour. Even if they are temporarily ignited and then blasted into a room by the arrival of the shock wave, they will not automatically start a sustained fire unless the room is stuffed full of non-fire resistant inflammable junk like one *ENCORE* nuclear test house in 1953. Stonier makes it clear on page 39 that his firestorm fantasy was based on the 1955 U.S. Office of Civil and Defense Mobilization technical manual TM-9-2, *The Fire Effects of Bombing Attacks*, which stated:

"The effectiveness of fire as a weapon of war was demonstrated in World War II. Structural damage caused by fire accounted for 80% of the total damage to cities attacked by airborne weapons. The great fire attacks on the cities of Germany and Japan were scientifically planned ... Lessons learned from these attacks and from the atomic bomb attacks on Hiroshima and Nagasaki should provide valuable guidance to planners ..."

Because the 6 volumes of the U.S. Strategic Bombing Survey reports on Hiroshima and Nagasaki which explained the mechanism of the fires and gave survey data on the causes of the fires were classified secret until 1947, that 1955 manual omitted all of the relevant facts needed to evaluate the fire hazard from nuclear weapons! No lesson can be learned without the facts! Stonier was fooled into ignoring the fact that the inflammable fuel loading determined the intensity of the fires produced, although on page 42 he admitted that:

"The firestorm at Hamburg ... was even more intense and lasted longer than the one at Hiroshima."

The firestorm at Hamburg developed in a congested area of 3-5 storey highly inflammable medieval wooden buildings. Hiroshima and Nagasaki had predominantly 2 storey wooden buildings due to the earthquake risk in Japan, so the lower fuel loading in Japan produced a less intense firestorm than at Hamburg (where the winds

uprooted trees). In modern brick and concrete cities, the firestorm risk is extinguished due to insufficient fuel loading regardless of the number of ignition points (or matches used), but instead of recognising the trend, *Stonier assumes that modern brick and concrete cities will burn like the multistorey medieval wooden crowded area of Hamburg*. So he quotes a description of the Hamburg firestorm from the 1955 U.S. Office of Civil and Defense Mobilization technical manual TM-9-2, *The Fire Effects of Bombing Attacks*:

"The pillar of burning gases rose more than 2.5 miles high and was about 1.5 miles in diameter. The rapid rise of hot, burning gases caused an influx of new air at the base of the pillar. This onrush of air, or fire wind, reached gale-like proportions as it headed toward the fire centre. One and a half miles from the fire area of Hamburg this draft increased the wind from 11 to 33 miles per hour. At the edge of the fire area, velocities must have been appreciably greater, since trees 3 feet in diameter were uprooted."

The Hiroshima firestorm due to a nuclear weapon was not dramatic enough, so Stonier used the non-nuclear firestorm at Hamburg, *without grasping the lesson that the nuclear bomb failed to produce a bigger firestorm because Hiroshima had a smaller fuel loading per unit area than Hamburg, and that in modern cities which have no wooden houses there would be no firestorm risk!* Even in Hiroshima where there was a firestorm, the probability of survival depended on the thermal flash protection and the type of building a person was in, not on the presence of the firestorm that developed slowly enough that most people in brick and concrete buildings were able to prevent ignition or evacuate in safety.

## STONIER ON THE FALLOUT PROBLEM

Stonier gives an honest and generally accurate overview of the great success of civil defense countermeasures against fallout which were demonstrated at nuclear weapons tests and in experiments with nuclear reactor waste. The 40 acre White Oak Lake at Oak Ridge in Tennessee used as a liquid nuclear waste dump for fission products from the Manhattan Project in 1943 until the fall of 1955, when it was drained, producing a radioactive lake bed with dry soil containing 7,300 pCi/gram of Cs-137 and 360 pCi/gram of Sr-90 (ref.: S. I. Auerbach, pp. 340-2 in A. W. Klement, Jr., *Radioactive Fallout from Nuclear Weapons Tests*, U.S. Atomic Energy Commission, report TID-7632, 1962).

Generations of cotton rats (which receive a harmless total of 2.9 rads/week) were studied while living on that contaminated area from 1956-60, and it was found that 86% of their radiation dose was from external gamma radiation (mainly from long-lived Cs-137, Ru-106, and Co-60), 10% was from internal tissue contamination (mainly long-lived Sr-90 in the bones), and the remainder was from radionuclides during their passage through the gut (ref.: Paul B. Dunaway and Stephen V. Kay, "Effects of Ionizing Radiation on Mammal Populations on the White Oak Lake Bed", pp. 333-7 in **Vincent Schultz and Alfred W. Klement, Editors, *Proceedings of the First National Symposium on Radioecology, Reinhold, N.Y., 1963***). This evidence suggests that the long-term radiation hazard in contaminated areas is dominated by the external gamma radiation, not the uptake from dietary contamination. However, in the short-term, iodine-131 is important (because of its 8-day half-life, iodine-131 was not present in the aged nuclear waste).

Stonier on page 66 summarizes the information on gamma radiation shielding by buildings from **page 161 of the June 1959 Congressional Hearings on The Biological and Environmental Effects of Nuclear War** and page 473 of the **1962 edition of Glasstone's *Effects of Nuclear Weapons***.

These state that a wood-frame house gives a protection factor of 1.7, while lying down in a brick veneer house gives a protection factor of 6, the middle of an underground basement gives 25, and a **core shelter (a table surrounded by and piled with furnishings or other shielding materials)** substantially increases the total protection factor. Basements of multistorey buildings give much greater protective factors in the range 250-1,000. A foxhole shelter 3 feet in diameter and 4 feet deep gives a protection factor of 40 if fallout is kept out with a cloth or board, but there is no shielding above it. This is because 90% of the gamma dose outside is direct gamma rays from a massive area of fallout contaminated ground - a median distance of 15 metres on smooth ground - so most of the radiation is coming almost horizontally, and this is extremely attenuated by the long slant path it travels through the soil, into the foxhole. The 10% of the air scattered gamma rays or "skyshine" comes from all angles of sky, but this again is mostly from long distances, and hence it is from angles nearly horizontal, so the limited solid angle of overhead sky to which someone in a foxhole is exposed does substantially cut down the gamma dose from skyshine, as well as the direct radiation shielding.

On page 193, Stonier gives the estimate from p. 577 of Knapp's testimony to the March 1960 U.S. "Hearings Before the Subcommittee on Military Operations, Committee on Government Operations, House of Representatives, *Civil Defense*", that the average outdoor protection factor due to shielding by irregularities in the ground increases from about 1.3 initially to 3 after a month and to 4 after two years, as the fallout is "weathered" into the ground which absorbs more of the radiation. On page 191, Stonier quotes **P. E. Moreland's testimony** at p. 563 in the same 1960 hearings which **quotes some of the detailed secret calculations of the decay rate from fallout outdoors on a smooth surface in Philip J. Dolan's report *Theoretical Dose Rate Decay Curves for Contamination Resulting from Land Surface Burst Nuclear Weapons* (DASA-528, 1959, classified Secret-Restricted Data) as  $2,750t^{-1.23}$  (r/hr)/(kt/sq mile) with an accuracy of plus or minus 25% up to 100 days.**

Stonier points out on page 81:

"Ground water supplies ... would probably not become appreciably contaminated, because of sedimentation and natural filtration by soils and rock. Furthermore, the rate of movement of water in the ground is very slow, and the resulting 'hold up' time permits considerable decay of the radioactivity."

On page 195, he calculates the contamination hazard to water in a 3,000,000 gallon open reservoir 200 feet in diameter, with a surface area of nearly 3 acres. Assuming 10% of the fallout radioactivity is solubility in water (this is the surface contamination on silicate fallout particles, mainly composed of volatile fission products which only condense after the molten droplets of silicate have solidified into small, insoluble glassy marbles), he finds that a total fallout deposit at one hour after detonation of 640 MCi/square mile of beta activity from fission products will give 1 Ci/gallon of which 0.1 Ci/gallon is water soluble and doesn't settle out to the bottom of the reservoir. Using the **30-day emergency water contamination safety limit of 0.03 mCi/litre stated on page 535 of Glasstone's 1957 *Effects of Nuclear Weapons***, Stonier then finds that the soluble activity decays to the safe limit at 12 days after burst.

Stonier on pages 85-6 notes that 5 years after the 1954 *Bravo* nuclear test at Bikini Atoll, the remaining radioactivity in marine life was almost all due to neutron-capture isotopes of zinc, cobalt and manganese (which are rare in sea water and therefore concentrated in marine food chains), rather than fission products. On the islands, however, the long-term radioactivity was the fission products Cs-137 (90% of the activity in land plants) and Sr-90 (10% of the activity in land plants). Stonier states on p. 86: "This is an unusual situation and is due to the low potassium content of the Marshall Islands soil." But the fact that Sr-90 was only a minor hazard on

the coral islands was due to the chemical nature of coral: it is calcium carbonate, and so the plants had an immense amount of calcium (which is chemically fairly similar to strontium) available, diluting the uptake of Sr-90. **Since Cs-137 itself is chemically similar to potassium, researchers were later able to reduce the Cs-137 uptake by adding potassium-rich fertilizer to the soil, diluting the uptake of Cs-137 by plants. Taking potassium iodate tablets saturate the thyroid gland, blocking almost all I-131 uptake, works on the same dilution principle of "crowding out" the radionuclide, using a non-radioactive chemically similar element;** researchers M. C. Bell and S. L. Bell experimentally found another simple countermeasure against I-131 in milk was simply to feed 2 grams of KI daily to *the cattle themselves* (this reduces the I-131 in milk by a factor of about 2 or 3 which less than the protection factor from taking personal KI tablets, but still gives a useful reduction of the hazard; see their paper *Possible effects of nuclear power reactor accidents on agriculture*, University of Tennessee Agriculture Experimental Station report RR 81-11, 1981). Stonier correctly notes that uranium and plutonium is poorly absorbed by food chains and animals.

He then summarizes the 1960 U.S. Department of Agriculture's Agricultural Research Service Special Report 22-55, *Radioactive Fallout in Time of Emergency: Effects upon Agriculture*. This recommends diluting and thus blocking much of the high Sr-90 uptake rates in acidic soils (**more acidic than pH 6.5**) by applying calcium (chemically similar to strontium) in the form of lime (calcium carbonate, CaCO<sub>3</sub>, e.g. chalk, limestone, or coral) or gypsum (hydrated calcium sulphate, CaSO<sub>4</sub>·2H<sub>2</sub>O). Obviously if the soil is already well-limed this is unnecessary since the Sr-90 uptake rate will be diluted anyway. Alternatively, foods with low calcium content and thus low strontium concentrations can be grown, like potatoes which contain only 10 mg of calcium per 100 calories, unlike leaf crops which contain far more calcium and thus strontium. Another option is that the highly contaminated land can be used for breeding animals, since Sr-90 will concentrate in the inedible bones tissue of animals, not the meat. A later publication by the U.S. Agricultural Research Service is their **1962 *Agriculture Handbook 234, Protection of Food and Agriculture Against Nuclear Attack*** which on p. 12 states that wooden single-storey barns give gamma protection factors of 2, while 2-storey wooden barns with lofts full of hay give a protection factor of 5; moving animals into barns and on to winter feed gives much greater additional protection because it avoids the fallout contact hazard of beta ray doses from skin contamination and the gut exposure to beta radiation from ingested contaminated grass. Page 15 states that 1-5% of the Sr-90 in the soil is removed by each crop cycle; the higher figure applying to sandy, silicate soils which do not chemically bind Sr-90. Farmland and also grassland which is not used for agriculture can have the gamma dose rate reduced by deep plowing to bury the Cs-137, shielding the radiation. On p. 26 it gives data proving that the soil uptake (not fresh fallout particle contamination) of seeds like wheat and corn is trivial compared to the uptake by the leaves of those plants, suggesting the growing of seed crops in highly contaminated areas instead of leaf or stem crops:

"For example, in wheat grown on artificially contaminated soil, the leaves showed 11,422 disintegrations from strontium 90 per second per gram, compared with 638 in the grain. And most of this was in the bran. In corn, the difference was even more striking. About 4,683 counts were observed in the leaves and only 18 in the grain. The same story held true for cesium 137."

Page 18 deals with I-131:

"Available information indicates that from 5-10% of the daily intake of iodine-131 is secreted in milk of dairy cows. ... *Milk produced from pastures that received fallout equivalent to a radiation level of 30 roentgens per hour, or higher, 1 hour after a nuclear bomb explosion should not be used immediately for consumption by infants.* ... the dairy farmer can confine lactating animals to the barn before the appearance of fallout in the area and provide forage and feed that had been harvested before the detonation or stored for 2 months after exposure to fallout. Freshly contaminated forage can be fed to non-lactating stock. ... Freezing of packaged milk for storage before delivery would be one way of handling the problem. ... During the period when fresh milk supplies were not available, reconstituted dry milk or canned milk could be safely used. ... There should be no destruction of milk contaminated with iodine-131, since it can be processed into products such as butter, cheese, powdered milk, and canned milk, and stored for a period of time to allow the [radioactive] decay to take place. If processing facilities are not available locally, or are not adequate to handle all the milk involved, the contaminated milk can be fed to pigs or calves."

#### Stonier's false claim that insect carried plagues will be enhanced by gamma radiation killing off insect predators (he ignored beta irradiation of insects)

Dr Stonier's chapter 9, "Pestilence and Plague: The Threat of Epidemics" and the remainder of the book is contrived and deceptive, citing in his bibliography - but ignoring in his text - documentary evidence from nuclear test ecological recovery at Eniwetok Atoll near two megaton yield tests which contradicts his case that the insects will inherit the Earth. He entirely ignores the **plague of 1348-50 which killed a third of the population in Western Europe** as an **example of the human recovery potential after a huge disaster (see Jack Hirshleifer, *Disaster and Recovery: The Black Death in Western Europe*, RAND Corporation report RM4700, 1966, [online PDF linked here](#))**. Like his ability to ignore the lack of firestorms in modern London buildings and the limited firestorm intensity even in the wooden two-storey buildings of Hiroshima, and to misrepresent the Hamburg firestorm in 3-5 storey medieval wooden overcrowded buildings as illustrative of the threat to modern concrete, steel and brick cities, Stonier misrepresents plague risks.

He delves back selectively through the history of epidemics to find examples that tend to support his thesis (simply ignoring all evidence to the contrary) such as **tularemia** (a virulent bacterial infection transmitted by tick bites, skin contact, inhalation and ingestion, which concentrating in the lymph nodes, causing weakness and fever but not usually death) outbreak of 1941 in **Rostov-on-Don, Russia**, where 37,000 people were infected. This outbreak resulted from the wartime conscription, which left the crops unharvested in the fields, allowing field mice to proliferate, spreading tularemia through their droppings and ticks on the hay and grain stored in barns, which were used by soldiers for sleeping quarters.

Stonier then studies the second bubonic plague outbreak that began on 14 August 1907 in San Francisco, infecting 167 people of which 89 died, **over a year after the city was devastated** by the **great earthquake and fire of 18 April 1906**. This plague was spread by fleas living on rats breeding in the insanitary conditions of the wrecked city, which still lacked functioning sewage disposal systems.

Stonier moves on to the more deadly pneumonic plague which broke out in Oakland, California, 1919, when a hunter infected by flea bites from the fur of a groundhog spread plague, infecting 14 cases of which 13 proved fatal. Stonier then discusses the similar mechanism for the larger-scale pneumonic plague outbreak amongst fur-trappers in Manchouli, Manchuria, 1910-11. That plague killed 60,000 because it was spread first in crowded underground inns in Manchouli, and later (as cases appeared) these infected people panicked and fled on the Chinese Eastern Railway to numerous towns throughout the whole country.



On page 131 Stonier attempts to glue these historical plague examples to the aftermath of nuclear warfare, by claiming that the birds and mammal predators for insect disease vectors will be killed off by 1,000 roentgens of gamma radiation exposure, whereas adult insects will survive 100,000 roentgens and can reproduce at doses of up to 5,000 roentgens. He points out that conifers like pine trees are about as vulnerable as mammals (spruce seeds are killed by 1,000 roentgens, he states on p. 143), but in general plants can withstand 5,000 roentgens of gamma radiation, while mustard seeds can "absorb 92,000 roentgens and still produce viable plants" (Stonier, p. 131). On page 132 Stonier points out that 13 out of 15 flora species were injured or killed over five years by fallout radiation at the world's most highly contaminated fallout location, Gegen Islet at the northern edge of Rongelap Atoll, giving the island a grey rather than green colour as seen from aircraft five years later. Gegen Islet was the downwind fallout hotspot location 100 miles downwind of the 15 Mt *Bravo* test, giving a 3,000 rads gamma dose within 48 hours, and thousands more at a slower rate, later on. Moving southward in Rongelap Atoll, the radiation doses were smaller, and the damage less. At Kabelle Island, for instance, only 3 species of flora were killed, including the mangroves, and at Eniwetok Islet in Rongerik Atoll (further downwind) only 2 species of flora were affected by fallout. (References: **F. R. Fosberg, "Plants and Fall-out", *Nature*, v. 183, 1959, p. 1448**, and Robert A. Conard, Brookhaven National Laboratory report BNL-609, 1961, pp. 85-6.)

Stonier believed that radiation kills off most birds and animals that normally keep eat insects, thus allowing plagues of relatively radiation-resistant insects to breed on the surviving vegetation and spread diseases to surviving humans: "The result: insect plagues. Associated with the spread of insects would be the spread of certain insect-borne diseases." This was based on ecological studies by G. M. Woodwell at Brookhaven National Laboratory, who exposed an oak and pine forest on Long Island, New York, to gamma radiation from cesium-137 (**G. M. Woodwell, "Effects of Ionizing Radiation on Terrestrial Ecosystems", *Science*, v. 138, 1962, pp. 572-7**). Stonier observes on p. 135 that "where the oaks received 5 roentgens per day, the defoliation by insects was about five times as great as that observed in control areas." This cesium-137 gamma exposure has no relevance to the overall effects of radioactive fallout, since it ignores the effects of beta radiation (which is easily stopped by tree bark) upon insects.

Stonier cites in his bibliography, but chooses to **ignore completely in his text (without explanation) the rapid recovery and lack of insect plagues on Bogombogo Island (codenamed "Belle Island" by America) at the North-West of Eniwetok Atoll in the North Pacific**, which was selected for detailed ecological studies following two high yield nuclear weapons tests: **Dr Ralph F. Palumbo, *Radioactivity and Recovery of the Land Plants at Eniwetok Atoll, 1954-1957, University of Washington report UWFL-66, July 1960 (PDF linked here)***, see the **recovery photos linked here**. Bogombogo/Belle Island was 2.55 statute miles (4.10 km) from the centre of Elugelab Island, ground zero of the 10.4 megatons *IVY-MIKE* thermonuclear weapon test of November 1, 1952, and the 1.69 megatons 80% fission *CASTLE-NECTAR* test was detonated at the same spot on a barge over the *IVY-MIKE* crater on May 14, 1954. It received heavy blast and thermal damage, water wave flooding, and fallout radiation including extensive beta and gamma irradiation of plants (gamma of over 850 R/hr at 2 hours after *IVY-MIKE* according to page 34 of report **WT-615**, which - **from the mean fallout arrival time and peak dose rate time measured under the cloud** - suggests an infinite dose of over 8,000 R, and then another 400 R to 6 months after *CASTLE-NECTAR* and beta doses near contaminated surfaces are about ten times larger, see Stonier p. 143). Dr Palumbo states in his article **"Recovery of the Land Plants at Eniwetok Atoll Following a Nuclear Detonation" (*Radiation Botany*, vol. 1, 1962, pp. 182-9):**

**"The *Mike* detonation of 1952 had removed most of the plants and top soil from Belle Island, resulting in the depletion of some of the elements essential for plant growth. In spite of these deficiencies regrowth of the plants at Belle Island was rapid. ... A photograph of Belle Island taken [on May 22, 1954] eight days following the *Nectar* detonation shows the extent of the damage sustained by the plants. From the air the island looked brown and desolate. On closer inspection it was found that most of the plants had been scorched by the heat wave and many of them had been blown over or broken by the blast. ... Recovery of the plants was rapid. ... On the eighth day green buds, 1-3 mm in length, were observed on the stems of *Scaevola* and *Messerschmidia* plants. On the thirty-fifth day the shoot leaves were 7-15 cm long, covering much of the old stems and giving the plants a green and healthy appearance. By this time many of the other plants had formed new leaves and three species (*Portulaca*, *Triumfetta*, and *Messerschmidia*) had produced new flowers and fruits. The island now had lost its scorched appearance; from the air it looked green rather than brown as it had one month earlier.**

**"In August, three months after the detonation, the plants were growing well and some species, such as *Boerhaavia*, had produced new flowers. The leaves of most of the species had grown to maximum size, and the branches had grown almost to the pre-*Nectar* dimensions."**

Stonier fails to mention these Eniwetok Atoll studies on an island 2.55 miles from two large thermonuclear tests. Instead, he discusses the example of islands in Rongelap Atoll, 100-115 miles downwind from the 1954 *BRAVO* nuclear test. Rongelap received a wide spread of gamma radiation doses, ranging from 3000 rads over the first 48 hours in the north (near the "hot line" of the fallout pattern) down to 175 rads on the main island in the inhabited south of the atoll. Insects could travel throughout the atoll, so insects surviving in the south could repopulate the northern islands.

**Stonier completely failed to take into account the fact that beta radiation, which is stopped by the skin of animals and the feathers of birds, can irradiate the entire bodies of small disease-vector insects. This beta radiation fact negates all of his arguments about insects surviving gamma radiation better than their predators:**

"Three practical considerations were found to merit attention in the evaluation of the impact of fallout radiation on the terrestrial insects and associated invertebrates. Firstly, the relatively low dose levels that will affect developmental stages as compared to adult stages; secondly, the lower doses required to produce late mortality as compared to those required for early deaths; and thirdly, the relatively low doses that will cause sterility. The calculated potential beta doses indicated that the dose level expected to sterilize a large majority of the organisms considered in this study would be found in areas bounded approximately by the 50 R/hr at 1 hr gamma contour (4,600 beta rads accumulated in about 5 days) for a 1 MT burst, by the 100 R/hr at 1 hr gamma contour (5200 beta rads in about 5 days) for a 10 MT burst and by the 100 R/hr at 1 hr contour (5200 beta rads in about 14 days) for a 100 MT burst."

**- Joseph D. Teresi and Curtis L. Newcombe, *An Estimate of the Effects of Fallout Beta Radiation on Insects and Associated Invertebrates*, AD0633024, 1966.**

Citing the report by E. S. Stone et al., "Genetic Studies of Irradiated Natural Populations of *Drosophila* [fruit flies]" (published in *Studies in the Genetics of*



*Drosophila*, University of Texas Publication 5721, 1957), Stonier states on p. 132:

"Studies of natural populations of fruit flies were made on Rongelap Atoll ... it was found that these insects readily survived the heavy fallout ... the fly population recovered rapidly. On Rongelap the fruit fly population had a lowered rate of egg development in August 1955 (about a year and a half after the *Bravo* shot), but by August 1956 this effect was no longer apparent. On Bikini itself, on the other hand, the fruit fly population sampled at that time still showed a lowered rate of egg development, although it did not seem to be a serious handicap to the overall population."

This is wrong because the insect populations in the heavily contaminated islands were not surviving high radiation doses, but were simply being repopulated by insects which survived low radiation doses on islands further to the south in each atoll. In other words, these were not controlled populations. Nobody tagged individual fruit flies: flies killed by beta radiation on the heavily contaminated northern islands were simply replaced by flies moving in later from less contaminated areas, once the intense fallout radiation levels had decayed. In the kind of all-out nuclear war Stonier was analyzing, with the whole land area carpeted with fallout, there would be no areas of surviving insects in slightly contaminated areas to repopulate the highly contaminated areas once the intense radiation had decayed.

Having used data from Bikini and Rongelap atolls where insects surviving in areas of low contamination later spread to repopulate more severely contaminated areas when the intense radiation levels decayed, Stonier reverses this and again ignores the beta radiation effects on insects in his concluding paragraph to Chapter 11, *Ecological Upsets: Plants, Insects and Animals* on page 144:

"Mushrooming insect populations are likely to spread from the radiation-damaged areas in which they arose, and, like the locusts of biblical times, wreck havoc in previously undamaged areas. Accompanying the insect plagues would be the plant diseases transmitted by insects, particularly those diseases which attack plants that have been injured or weakened by insect or radiation damage. The combined assault of radiation, insects, disease and fire could temporarily strip off the plant cover ... leaving a naked earth to be ravaged by the ever-present forces of erosion."

This is complete fantasy, as we have shown, because Stonier ignored beta radiation effects on insects! In his testimony to the U.S. Congressional Hearings of Subcommittee on Armed Services, *Civil Defense Hearings, 1963* page 4938, Stonier stated that the insects would inherit the Earth: "one can envision an assault on the plant cover which would make the locust plagues of Biblical times look like tea parties." (Quoted by **Robert U. Ayres, *Environmental Effects of Nuclear Weapons*, Hudson Institute report HI-518-RR, 1965, volume 1, p. vi.**)

#### Stonier predicts a nuclear winter which may lead to an ice age

In chapter 12, *Ecological Upsets: Climate and Erosion*, Stonier predicts that a nuclear war will produce a nuclear winter which may trigger a new ice age. This was generally ignored for twenty years until restated with some downward revision of effects but with similarly false targetting assumptions plus expensive media hype by the public relations company TAPPS used in 1983 to attract the media to attend their lavish "**Conference on the Long—Term Worldwide Biological Consequences of Nuclear War**", in Washington, D.C. The editor of *Nature*, Dr John Maddox, in his editorial in 1983 (vol. 312, p. 593) called the 'nuclear winter' scandal from TAPPS 'hype' because they got publicity by means of handing over \$50,000 to a public relations company (the funding came from the Kendall Foundation). This is how political pseudo-science is marketed via media hype, caveat emptor! Lacking this P.R. funding, Stonier went unheard twenty years earlier.

When the buildings of Hiroshima burned, and when forests burn, moisture is carried up in the atmosphere along with the soot. When the column of dusty, hot, humid air reaches cold air at high altitudes, the moisture condenses on to the soot, and you get black rain out. This occurred at Hiroshima: it wasn't contaminated with significant radioactivity because the firestorm only began 30 minutes after the explosion, by which time the airborne radioactive mushroom cloud had been blown many miles downwind from the firestorm area. So there was no nuclear winter at Hiroshima, **nor did the ignition of 700 Kuwaiti oil fields by Saddam Hussein's army in 1991:**

**"At the peak of the [700 Kuwaiti oil field] fires, the smoke absorbed 75 to 80% of the sun's radiation. The particles were never observed to rise above 6 km and when combined with scavenging by clouds gave the smoke a short residency time in the atmosphere and localized its effects." - Wikipedia article on Nuclear Winter**

But the fundamental reason why nuclear winter is a complete hoax is the **subtle, sophisticated technical problem that brick and concrete just doesn't burn like wood, which is why 57 consecutive nights of all-out Nazi incendiary Blitzing spectacularly failed to turn London into the firestorm like the wooden medieval area of Hamburg, as documented by George R. Stanbury who was in charge of the British government's firestorm countermeasures during World War II and the Cold War.** He explains in detail how the Hamburg firestorm was produced in his originally restricted article, 'The Fire Hazard from Nuclear Weapons', *Fission Fragments*, U.K. Home Office, Scientific Adviser's Branch, London, No. 3, August 1962, pp. 22-6:

**"We have often been accused of underestimating the fire situation ... we are unrepentant in spite of the television utterances of renowned academic scientists who know little about fire. ... Firstly ... the collapse of buildings would snuff out any incipient fires. Air cannot get into a pile of rubble, 80% of which is incombustible anyway. This is not just guesswork; it is the result of a very complete study of some 1,600 flying bomb [V1 cruise missile] incidents in London supported by a wealth of experience gained generally in the last war. Secondly, there is a considerable degree of shielding of one building by another in general. Thirdly, even when the windows of a building can "see" the fireball, and something inside is ignited, it by no means follows that a continuing and destructive fire will develop. ... A window of two square metres would let in about  $10^5$  calories at the 5 cal/cm<sup>2</sup> range. The heat liberated by one magnesium incendiary bomb is 30 times this and even with the incendiary bomb the chance of a continuing fire developing in a small room is only 1 in 5; in a large room it is very much less. Thus even if thermal radiation does fall on easily inflammable material which ignites, the chance of a continuing fire developing is still**

quite small. In the Birmingham and Liverpool studies, where the most generous values of fire-starting chances were used, the fraction of buildings set on fire was rarely higher than 1 in 20.'

In Hiroshima, 40 kg/m<sup>2</sup> of combustibles per unit of total ground area was necessary to create even the relatively weak firestorm with low intensity fire winds in that city, so all firestorms occurred in city areas with wooden buildings, like Hiroshima or the medieval part of Hamburg. The combustible fuel load in the firestorm area of Hamburg in 1943 was 156 kg/m<sup>2</sup>. (These data are taken from page 11-143 of Philip J. Dolan's originally secret *Capabilities of Nuclear Weapons*, U.S. Defence Nuclear Agency: unfortunately the declassified version of chapter 11 is the only chapter not available as a PDF file, although it is available on microfiche at the British Library reference depository in Boston Spa. Dolan states on page 11-143:

"The intensity of a large fire depends, in part, on the average amount of combustible material per unit area. In Hamburg, where 45 percent of the firestorm area was covered by buildings containing about 70 lbs/ft<sup>2</sup> of fuel, the average loading was 32 lbs/ft<sup>2</sup>. A strong firestorm was produced in the area from the World War II incendiary bomb raid. In Hiroshima the average fuel loading [for the firestorm area] is estimated to have been 8 lbs/ft<sup>2</sup>."

Dolan also points out in *Capabilities of Nuclear Weapons* that few fires are predicted: "The low incidence of predicted indoor ignitions results from the low elevation angle of the fireball. The artificial horizon of trees and buildings obscures the fireball from most residential windows ... the average elevation angle of the artificial horizon is about 6 degrees for New Orleans.") So there is no basis for firestorms and massive atmospheric soot injections, purely from the fact that the medieval wooden cities of Hamburg and Hiroshima have been replaced with modern brick, concrete and steel construction.

Stonier's nuclear winter chapter on page 146 quotes Colonel Langer describing the dust in the atmosphere after the 10 Mt *Mike* surface burst on Elugelab Island at Eniwetok Atoll in 1952. Langer stated on p. 839 the June 1959 Congressional Hearings on the *Biological and Environmental Effects of Nuclear War that Mike caused*:

"an amber glow along the entire horizon. It was the most artificial thing I have ever sensed in my life. We had displaced many millions of tons of coral debris [actually only about 1 million tons, since the mass of lofted fallout was 0.1 megaton per megaton of TNT yield as testified correctly by Dr Alvin C. Graves to the June 1957 Congressional Hearings on *The Nature of Radioactive Fallout and Its Effects on Man*] that had been lifted up to forty and fifty thousand feet ..."

Stonier then states on p. 147 that this was similar of volcanic eruption dust like that from Krakatoa in 1883, and states that sunlight intensity measurements showed almost a 10% reduction in sunlight for 3 years after Krakatoa, contributing to the 1 °F global temperature fall in 1884. He adds that volcanic eruption of Tomboro in Indonesia from 7-12 April 1815 caused darkness for 3 days at a distance of 300 miles downwind, and prevented a summer in 1816.

**Problems begin when he tries to extrapolate from the massive crater sizes on Pacific atolls of coral to nuclear surface bursts dry soil, which produced immense exaggerations until about 1991, which we have already documented in a earlier post.** After the nuclear winter idea was hyped by TTAPS in 1983, Dr Edward Teller had incredible difficulties in declassifying the data on the amount of dust lofted into the atmosphere from a few 1950s nuclear craters. The amount of lofted material was very well known because the specific activity (fissions per gram of mass) of fallout samples taken from all the atmospheric nuclear tests were available, but it was kept secret. This number is also important for civil defence, because it shows the visibility of the fallout deposit that corresponds to any given amount of radioactivity deposited after a surface burst. The mass of crater material lofted is typically 100 metric tons per kiloton, around 1% of the crater volume, and most of it is large particles which settle out within hours to days after detonation.

Stonier, after exaggerating massively the dust lofted, notes on p. 149 that 67% of 2-micron diameter fallout particles are deposited from the stratosphere within 18 months, when there would still be enough dust present to reduce solar radiation by 20%, causing a 7 °F temperature drop over North America which would shift the wheat growing belt 500 miles south:

"one can readily envisage the mechanism proposed by W. J. Humphreys [*Physics of the Air*, 2nd ed., McGraw-Hill, N.Y., 1929; 3rd ed., 1940], whereby the land surfaces heat up barely at all throughout most of the year, while water surfaces near the Arctic tend to freeze up more and more each winter. If a sufficiently large part of the North Atlantic were to freeze over to deflect the Gulf Stream, then Europe would freeze over completely. (England is as far north as Labrador, but the west winds picking up heat from the Gulf Stream keep the continent warm.) ... If the detonation of a large number of surface bursts should lead to an ice age, then the distortion of nature would last for millennia."

This is not possible using nuclear weapons, for the reasons already stated. Silicate or coral surface burst fallout particles mainly scatter light, with minimal absorption. Soot is needed for strong absorption of light. There is not enough soot produced in nuclear detonations over any of the possible targets to produce a nuclear winter, let alone an ice age.

#### TAPPS 1990 OIL REFINERY TARGETING ASSUMPTION OF CONVENIENCE

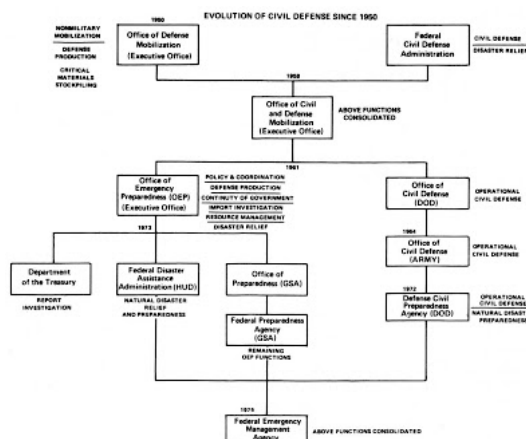
President Reagan in 1982 was talking about civil defense for bolstering U. S. deterrence of 40,000 Soviet main battle tanks (ready to invade the West, take over the resources, and thus shore up the impending economic implosion of communism for another few decades), and that "survival talk" was what led Dr Carl Sagan and others to suggest everyone would be frozen by a nuclear winter in 1983. Then the fake "better red than dead" assumptions of the 1983 calculations were revealed. In 1985, Dr R. D. Small and Dr B. W. Bush of Pacific-Sierra Research Corp assessed the smoke from 4,100 megatons distributed as 2 warheads per target on 3,459 counter-force targets in forests and grassland areas (*Science*, v229, p465). They found the smoke output was 300,000 tons for a January attack and 3,000,000 tons for an August attack. These figures are 100-1,000 times lower than the guesses made by the "nuclear winter" hype of 1982-3, because the smoke is only 3% of the

mass of vegetation burned (the rest is CO<sub>2</sub> gas and cinders): "The amount varies seasonally and at its peak is less by an order of magnitude than the estimated threshold level necessary for a major attenuation of solar radiation."

One of the original errors was overestimating the soot production by fire. The fraction of the mass burned that becomes smoke is only 1% for wood, 3% for vegetation, 6% for oil and 8% for plastic. So after some negative publicity about the "errors" in the "nuclear winter" hype, TTAPS (Turco, Toon, Ackerman, Pollack and Sagan) public relations experts in 1990 (*Science*, v247, p166) changed their targeting assumptions to make use of the figure of 6% soot emission by burning oil, by now assuming that 50% of primary petroleum stocks would be targets. I.e., they assumed that in a nuclear war, both sides would deliberately use nuclear weapons to create as much soot as possible by targeting oil refineries. This allowed them to go on with the hype. They simply ignored the lesson of Hiroshima, that firestorm soot is hygroscopic, absorbs moisture from the air, condenses in the cool air at high altitude, and falls back as rain within a few hours. But then, they ignored *all* of the civil defense lessons from Hiroshima, so why not also ignore the fate of the soot from fires after a nuclear explosion over an inflammable wood built city? They certainly were *consistent* in ignoring all of the effects of nuclear explosions in their political spin.

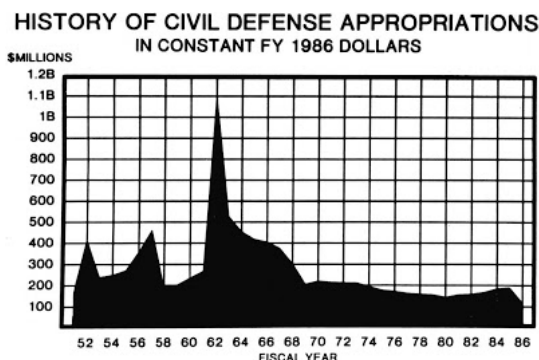
The basic equation for the fraction of sunlight absorbed during  $x$  metres of passage through a soot cloud containing  $s$  grams of soot per cubic metre is  $e^{-7xs}$ . However, smoke is rapidly dispersed and removed by the atmospheric weather systems, wind and rain, as occurred at Hiroshima.

## History of Cold War Civil Defence



**Above:** flowchart of American civil defense from 1950 to the emergence of FEMA in 1979. (From *The Federal Emergency Management Agency's Plan for Revitalizing U.S. Civil Defense*, U.S. General Accounting Office, report GAO/NSIAD-84-11, 1984.)

In Britain, civil defence was well established during World War II but was closed down until 1948 when the Berlin crisis (the Soviet Union blocked off Berlin's food supplies, trying to starve it into submission) and a secret British report warning of Russian nuclear weapons development, prompted a revival. In America, civil defence was revived with the Federal Civil Defense Act of 1950 after the detection of fallout from the first Russian nuclear test on 29 August 1949, and was stepped up during the Soviet backed Korean War of 1950-3 (see graph below). On 8 August 1953, fallout from the first Russian thermonuclear weapon (a large single stage fission weapon with fusion boosting from a layer of lithium deuteride around the fissile core) was detected, increasing concern and civil defence research. In March 1954, fallout from a 15 megaton American two-stage thermonuclear surface burst, *Bravo*, caused fallout contact beta radiation burns to unclothed, unwashed skin areas of Marshallese and the crew of a Japanese tuna trawler over 100 miles downwind, demonstrating some of the dangers from fallout.



On 4 October 1957, the Soviet Union launched the first satellite, Sputnik, which demonstrated that it was ahead of America in the space race, and that it had efficient rocket technology suitable for missiles carrying payloads the size of nuclear weapons. Missiles are supersonic and travel too fast to be intercepted by the fighter aircraft that are used to shoot down bombers, so this development increased the influence of the Soviet Union. (Richard Nixon, in a famous filmed debate with Soviet Premier Khrushchev after the Sputnik episode, argued that although the Soviet Union was ahead of America in rocket thrust, all was well because America was ahead of the Soviet Union in the development of colour television.) The aggressive, expanding dictatorship then in 1961 built a wall across Berlin to prevent people fleeing communism, callously shooting people who tried and leaving them to bleed to death, and in October 1962 tried to support Fidel Castro's communist dictatorship by shipping Cuba 42 intermediate range missiles with megaton thermonuclear warheads that could reach America with little warning time, unlike missiles launched from the Soviet Union. It was later disclosed that short range air defense tactical nuclear weapons had also been shipped to Cuba.

As a result of the Berlin crisis of 1961, President Kennedy asked Congress for an additional \$208 million for civil defence on top of the existing \$87 million budget for 1962, which was granted, and he published an enthusiastic letter about civil defence in *Life* on 15 September 1961. This civil defence money was used to identify,

signpost and stock (with food, water and radiation meters), the useful sheltering spaces in the basement of existing public buildings.

Kennedy's 1961 American civil defense response to Khrushchev's Berlin crisis was taken directly from the suggestion of Herman Kahn in his **testimony to the U.S. Congressional Hearings of the Joint Committee on Atomic Energy, Special Subcommittee on Radiation, 22-26 June 1959, *The Biological and Environmental Effects of Nuclear War*, pp. 882-922**, where on p. 913 Kahn called for \$100 million of radiation meters (Kahn called for 2 million dose rate meters and 10 million self-reading dosimeters with chargers) and a \$150 million utilization of existing structures for fallout protection (identifying, labelling and stocking the basements of public buildings as fallout shelters). **Kahn first analyzed this in RAND Corporation reports like RM-2206-RC and P-1888**. Kahn pointed out on p. 888 that **although the Soviet went into the war in 1939 hand-in-hand with the Nazis by jointly invading Poland (the Nazis invaded Poland from the West; the communists from the East), they had to fight the Nazis when attacked later on and suffered huge losses:**

"The Russians lost something like 10 percent of their population, and, they claim, about one-third of their wealth, in World War II."

**On page 889**, Kahn explains that in addition to this experience in recovery, Russia has more dispersed industry and population so it is less vulnerable than America, and there is in effect a "civil defense gap" between the two countries, undermining stability:

"... the [deterrent balance] situation may not be symmetrical. It is conceivable that there are circumstances in which the Russians could strike the United States and accept our retaliatory blow, when we would not be willing to strike them and accept their retaliatory blow. This has to do partly with the intrinsic vulnerabilities of the two countries. As you know, we are a much more concentrated country than the Russians. But mainly it has to do with their attitude toward war and the seriousness with which they pursue preparations. The Russians, for example, have a very large civil defense program. ... if you look at the Russian manuals, you will notice an enormous increase in understanding, ability, and capability in the last few years. ... the Russians in 1954 and 1955 had a great debate on the theory of the 'minimum deterrent'. **Malenkov [Soviet Premier, 1953-55]** said, 'And therefore we lucky Russians don't have to have such a large force as we used to have, because if it really is annihilation, nobody will start a war, and we can afford to get away with a much cheaper strategic force. We can start concentrating on consumer goods.'

"He was forced to retract publicly on that argument. **Khrushchev** [his successor] argued that wars weren't that bad and that the Soviets had to be prepared to fight and win wars in addition to being able to deter them. This was one of the major debates that they seem to have had and Khrushchev seems to be the official winner. As a result the Soviets have gone for a capability to win wars rather than to deter wars. This is a deliberate choice on their part which involves them in great expense."

This is the reason for the Soviet civil defense program, which **Kahn on pages 890-1** contrasts with American exaggerations of nuclear war and dismissals of civil defense as irrelevant in the nuclear age:

"As far as I know, **Frank Shelton** was the first Government official to make the flat statement [**in testimony to these 22-26 June 1959 hearings**] that the next war would not destroy all human beings, worldwide. ... There was a recent debate in the New Leader magazine between Bertrand Russell and Sidney Hook on 'Was it legitimate, or was it not, to risk killing all human beings in the world in the attempt to resist communism?' This was a serious debate. Nobody raised the question, that the debate was about a hypothetical subject which was not at issue."

**On page 892**, Kahn explained that civil defense was needed in America as an insurance not just against an imaginary all-out war, but against the real and present thuggery of the Soviet Union in testing the resolve of the West by a series of Munich-style, Nazi like invasions and evil (Berlin starvation attempt 1948, Hungary tank suppression 1956, Berlin wall 1961, Cuban missiles 1962, tank suppression of the Prague Spring 1968, etc.):

"Let me give you an example. In 1956, there was a revolution in Hungary which the Russians suppressed. There was at that time much pressure on the United States to intervene in that revolution to support the Hungarians. I myself felt rather strongly we should do something. ... There are reasons for worrying about a satellite revolt spreading and, if we had intervened, it is quite clear that there would very likely have been a widespread satellite revolt. Particularly if the Russians did nothing ... After all, some of the satellites revolted without any American intervention. ... the Russians are greatly concerned with internal stability. ... They worry about internal revolution in Russia more than we do. ...

"They would, I think, be under pressure to fight if we intervened in Hungary. If the fight was on a high explosive basis, I think we would lose. If the fight was on an atomic basis, I think we would probably still lose, but now there would also be side effects. [Fallout and a risk of escalation in nuclear war under certain circumstances.] ... I mean that if they can evacuate their civilians to places of safety, radiological safety; then we can't kill very many ... There are less than 50 million people in the largest 135 Russian cities. As far as we can tell, it is perfectly possible to evacuate 80 percent of this urban population and have all vital functions in the cities performed. This would leave only 10 million people at risk in 135 cities. Having been alerted, these could evacuate on short notice. ... Even if it did not kill many people such an attack would cause a lot of economic damage in Russia. But the Russians claim to have lost one-third of their wealth in World War II, and they recovered from it. In fact, they recovered by 1951. ...

"In other words, the Russians know that it can pay to accept large amounts of damage [they gained Eastern Europe as a result], rather than surrender, because they have actually gone through the experience. And while that is a very hard way to learn, it is also a very convincing way to learn by having actual experience. This doesn't mean they would be glad to repeat the experience - only that they may be willing to under less pressure than we would be willing to."

Kahn adds on **page 897** that the increase due to radiation in a nuclear war (on natural birth defects and natural cancer deaths) is small:

"The point of this story [an ignorant person claiming that without radiation there would be a utopia] is that peace also has its tragedies. ... While some women have a great concern about such possibilities during their pregnancy, it is only in such critical periods or when there is a tragedy in the immediate family that most people think about the burden of life. ... war is horrible ... But so is peace. To some extent the horrors of war are only an increase or intensification of some of the familiar horrors of peace and if you present a government with a sufficiently unpleasant peacetime situation it may decide that it prefers to go to war and accept the postwar world to living or temporizing with the peacetime problem."

Those 22-26 June 1959 hearings included a discussion of the fallout from 170 megatons of 1950s nuclear testing, which included 92 megatons of fission yield (the rest was fusion), and it gives computer predicted casualties (based on scaled up gross survival Hiroshima data, which is an exaggeration as we have seen due to the types of buildings, population distribution and the total lack of flash-blast nuclear effects knowledge in Hiroshima in 1945) for a nuclear war of 3,950 megatons of 50% fission yield, including 1,446 megatons detonating on America via 263 bombs of 1-10 megatons yield landing on 224 targets (these statistics are from pages 1 and 12 of the hearings). The predictions were severe damage (unrepairable) of 11.8 million housing units which was 25% of the total number in America (page 52 of the hearings), with 13% of the total American population killed on the 1st day and another 15% fatally injured and dying from radiation and other effects within 60 days (page 847). Page 857 of the hearings states that the basic survival curves used by the computer program were from Japan and nuclear tests. Even despite this exaggeration and ignoring civil defense, there were more survivors than fatalities. This is why the facts of unburnable brick and concrete in modern cities - as opposed to Hiroshima - is ignored and people like Postol and Eden are still claiming that a Hamburg-style intense firestorms in multistorey medieval wooden buildings now long since gone, could occur in a nuclear war, exaggerating casualties further. Another example, connected with the firestorm myth, is that firestorm soot would cause a "nuclear winter". The 22-26 June 1959 hearings include this at page 839 in the arm-waving testimony from John Wolfe: "The sun will shine through a dust-laden atmosphere ... blizzards and subzero temperatures would add death and discomfort; both food and shelter would be inadequate and production incapacitated." This led to Chairman Holifield enthusing over the Wolfe's nuclear winter, leading to a false claim on the same page from Colonel Lunger that the 10 megaton 1952 *Mike* test had lifted "... many millions of tons of coral debris ... to forty and fifty thousand feet ..." This contradicts testimony at the June 1957 fallout hearings, by testing director Dr Alvin C. Graves, who stated that the mass of lofted fallout (based on *Redwing* fallout specific activity) is about 0.1 megaton of debris per megaton of yield, i.e. about 1 million tons for the 10 megatons *Mike* test. In any case, the vast majority of the fallout descends quickly due to gravity, and so cannot cause a nuclear winter. The mass of vaporized micron sized debris is trivial in either air bursts or surface bursts.

Herman Kahn made the point on page 945 that preparations for the evacuation of cities in civil defense has nothing to do with the speed of a missile, having secret agents in Moscow, or preparing for a war; it is a bargaining chip in a crisis in case the enemy evacuates its cities in order to reduce your weapons's countervalue effectiveness, exerting leverage upon you to surrender to communism):

"In other words, imagine yourself going into a Munich-type conference where the Russians had evacuated their cities and you had not. They may even have done it slowly, say over a period of a week, and now you have to bargain with them, and they are evacuated and you are not. You are going to have some very tough bargaining to do."

In his 1984 book *Weapons and Hope*, Professor Freeman Dyson recalled a conversation with Herman Kahn on the topic of civil defense. Kahn was worried that the Soviet Union was preparing for World War III, and Dyson said "you are paranoid". Kahn replied: "Didn't you know that?," adding that you had to be paranoid in the 1930s to believe Hitler would kill the Jews, and you had to be paranoid in 1941 to believe that the Japanese would launch a surprise attack on Pearl Harbor. Chamberlain and basically the whole of England believed that Churchill was paranoid about the Nazis until it was too late to avert a world war. Sometimes it is the mainstream of opinion is living in fairy land, not the person labelled paranoid.

The failure of Britain to deter the Nazis from invasions in the 1930s was not the failure of "minimal deterrence". In the 1959 hearings, his *January 1959 Bulletin of the Atomic Scientists* article "How many can be saved?", and his 1960 book *On Thermonuclear War*, Kahn makes it clear that there are three types of deterrence:

- (1) deterring a direct attack on yourself (threat of retaliation needed),
- (2) deterring the invasion of other countries (threat of first strike needed), and
- (3) deterring internal activities in the enemy country (e.g., ethnic extermination).

Hitler did declare war on Britain first; he did not make a direct attack on Britain. He instead invaded other countries. *World War II was therefore, Kahn explains, the failure of retaliation-type deterrence. Instead, World War II was the failure of Britain to deter Hitler from invading other countries and terrorizing the Jews.* This is a vital distinction to Kahn, and it is essential to understanding the political point of civil defense as a leverage in Munich-style crises.

You can stop a direct attack on yourself by retaliating after you are hit, provided enough of your arms are hidden at sea in submarines or in hardened silos that can resist the enemy first strike. This is called a second-strike capability. Kahn explains that this was not enough for Britain in the 1930s: the whole problem then was that the Nazis were invading countries and terrorizing Jews in them, not fighting Britain. Britain's pacifist 1930s second-strike capability proved of no use in deterring the Nazis from the invasion of other countries and ethnic cleansing.

In order to have a *first-strike capability*, you need civil defense! It is only by being able to survive the retaliation of the enemy that you can *credibly* threaten and thus deter provocative actions by Nazi like thugs. Simply having a protected second-strike capability was not enough to coerce the Nazis at Munich or in the many other crises. To summarize Kahn's distinction:

**Second-strike capability:** you see a thug kicking a child and say to the thug: "If you do that to me, I'll kill you!" Result: the thug continues kicking the child, but (if your promise was credible) leaves you alone.

**First-strike capability:** you see a thug kicking a child and say to the thug: "If you don't stop now, I'll kill you!" Result: progress (if your promise was credible).



The only way to turn a pacifist deterrent second-strike capability into the "active deterrence" of a first-strike capability, is to have civil defense that makes you look credible. If you can are ready for war and prepared to dodge some of the thugs kicks, you become harder to knock down, and your promise is far, far more credible. Kahn pointed out in the 1959 hearings that if America did not have any civil defense, it did not have a first-strike capability and therefore would be unable to deter the Soviet invasion of Western Europe once the Soviet Union achieved nuclear missile parity with America in the 1960s and 1970s. Kahn feared that America's first strike-capability would disappear without civil defense to make promises credible, leaving America unable to deter anything but a direct attack, and thus encouraging the Soviet Union to use a series of invasions and Munich-style crises to spread (1959 hearings, page 883):

"The most important reason for being quantitative is because one may, in fact, be able to calculate what is happening. ...

"This is of some real interest; before World War II, for example, many of the staffs engaged in estimating the effects of bombing over-estimated by large amounts. This was one of the main reasons that at the Munich Conference and earlier occasions the British and the French chose appeasement to standing firm or fighting. Incidentally, these staff calculations were more lurid than the worst imaginations of fiction."

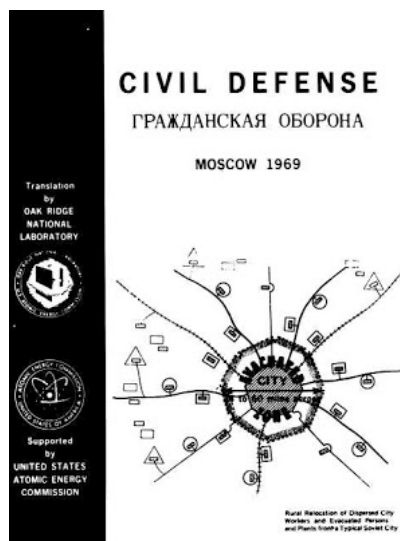
On page 943, Kahn explained that the same problem continued in the nuclear age:

"Many people object to air and civil defense, not because they underestimate the problem, but because they overestimate it. They think there is nothing significant that can be done to alleviate the consequences of a war."

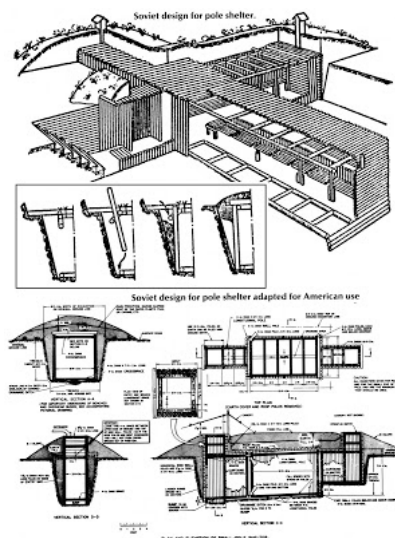
The next civil defence episode was inspired by research led by civil defence enthusiast Eugene P. Wigner, the designer of the first large scale plutonium production reactors of the Manhattan Project, and a pioneer in the application of the mathematics of group symmetries to particle physics. Wigner, a Hungarian, was appalled by the brutal suppression of the 1956 Hungarian uprising against communism by Soviet tanks, seeing a grave threat from the Soviet Union. He headed a civil defence research effort called "Project Harbor" for the U.S. National Academy of Sciences in 1964, the year he was awarded the Nobel prize for physics, and he initiated a civil defence research project at Oak Ridge National Laboratory.

**(Wigner's Project Harbor summary report on civil defence 1964 is linked here; the full 600 pages is not available, however notice that this summary report debunks the "threat" of neutron bombs to cities and points out that enhancing fallout radiation using a cobalt or similar casing decreases the initial effects from the weapon and also decreases the total fallout radiation dose; it just changes the dose rates, reducing the intense fission product radiation at early times and increasing the long term lower level radiation which gives plenty of time for decontamination before accumulating the [reduced] dose.)**

Wigner recruited experienced military survival experts like the engineer Cresson H. Kearny to the Oak Ridge National Laboratory project to supervise the translation of internal Soviet Union civil defence manuals into English, produce blueprints of the shelter designs, build the shelters from the blueprints using untrained American families, and test them to simulated nuclear explosions made by detonating thousands of tons of TNT during military blast effects studies.



For example, one Soviet civil defence manual by P. T. Egorov, I. A. Shlyakhov and N. I. Alabin (translated into English in 1973 as Oak Ridge National Laboratory report ORNL-TR-2793) contained a design (shown below) for an earth covered shelter made by lining and covering a trench with poles from trees chopped down in forest. American families build them within 48 hours, including felling the trees and making improvised internal furnishings:



This buried-pole shelter survived a peak overpressure of 40 psi in the Misers Bluff test, by detonating 200 tons of TNT beside it, as reported in Oak Ridge National Laboratory report ORNL-5541 (*Blast Tests of Expedient Shelters in the Misers Bluff event*, by Cresson H. Kearny, Conrad V. Chester and Edwin N. York) so it would have survived at ground zero in Hiroshima, with the earth cover attenuating the lethal nuclear radiation. **Page 144 of Kearny's 1979 Oak Ridge National Laboratory report, *Nuclear War Survival Skills*, states that this shelter gives a protection factor of 1,000 against fallout radiation. Carsten M. Haaland of Oak Ridge National Laboratory discusses the implications of this in Appendix B: *Should we protect ourselves from nuclear weapons effects?* (in John Dowling and Evans M. Harrell, *Civil Defense: A Choice of Disasters*, American Institute of Physics, N.Y., 1987, pp. 171-97):**

"In those few areas in the U.S. where conditions might support a firestorm, safe shelters could be constructed based on lessons learned from the Hamburg firestorm of 1943 in which 85% of the 280,000 people within the firestorm survived. If the people in Hiroshima had been in simple buried-pole shelters, not one person need have perished from weapon effects even at ground zero ... the gloominess of a nationwide picture of the U.S. after a nuclear attack suggests that a multilayer missile defense is required in addition to civil defense. ...

"Even if the people of Hiroshima had been inside the modest shelters they had constructed for protection against conventional bombing, the number of fatalities would have been only a small fraction of what it was. These people did not expect a new technology to be used. An air-raid alert throughout Hiroshima at 7 a.m. on 6 August 1945, was called off a half hour later because it appeared to the Japanese that only weather or reconnaissance planes were involved. When the *Enola Gay* arrived with two weather observation planes at 8:15 a.m., no one paid any attention. Many people were working outside, which increased the number of fatalities. Even so, about 193,000 survived, about 55% of the 350,000 people residing in the city at the time [Eisei Ishikawa and David L. Swain, *Hiroshima and Nagasaki, The Committee for the Compilation of Materials on Damage Caused by the Atomic Bombs in Hiroshima and Nagasaki*, Basic Books, N.Y., 1981, pp. 353 and 364; note that surveys following case histories only give the percentage of people who survived at any location; the absolute number of people in Hiroshima included a large number of Korean prisoners of war being used as slave labour whose presence was not admitted for political reasons in the early years after the war. So the absolute number of casualties in Hiroshima was larger than initially indicated, although this does not affect the percentage killed at any location, which is based on individually traced case histories.] ...

"An examination of Soviet radio broadcasts and publications reveals that they have two messages with opposite meanings concerning civil defense. For internal consumption, the message is that civil defense is effective and necessary. ... studies show that there has been a massive expansion of the Soviet strategic disinformation effort in the 1980s. [Vladimir Bukovsky, *Commentary*, 25, 1982; *Strategic Review*, vol. 11, pp. 79 and 81, 1983]. One dimension of Soviet strategic deception is to 'convince the West that ... preparation for war is a meaningless pursuit.' [Physicians for Social Responsibility, *Director's Report*, Cambridge, MA, 1983, p. 6.]"

The concern about Soviet Union civil defense hypocrisy led Wigner's team to adapt Soviet evacuation and expedient sheltering civil defence to American use in reports like **ORNL-4905 *Blast Tests of Expedient Shelters* (1974) by Cresson H. Kearny and Conrad V. Chester, ORNL-5040 (Cresson H. Kearny, Paul R. Barnes, Conrad V. Chester, and Margaret W. Cortner, *The KFM: A Homemade Yet Accurate and Dependable Fallout Meter*) and Carsten M. Haaland, Conrad V. Chester and Eugene P. Wigner, *Survival of the Relocated Population of the U.S. After a Nuclear Attack*, Oak Ridge National Laboratory report ORNL-5041 (1976).** This report points out on page 54 that one year after a 50% fission countervalue nuclear attack of 6,559 megatons (5,951 megatons of ground surface bursts) concentrated on American cities and industry, only 108 square miles or 0.004% of the area of coterminous United States would have a residual gamma radiation level above 0.1 R/hour (the very lowest reading possible on the U.K. digital **PDRM82** fallout survey meter).



**Above: fallout shielding factors throughout a multistorey concrete city building, from the 1973 DCPA Attack Environment Manual, Chapter 6, report CPG 2-1A6, Panel 18.** Although modern city buildings provide fallout protection, there was concern that they could be damaged by blast, leading to evacuation proposals following Soviet civil defence planning. Obviously, the traffic jams coming out of any major city on a Friday afternoon show that this policy needs special organization: Soviet crisis relocation planning was vitally important against fallout in the town of Pripjat, where people first sheltered for 36 hours in their houses after the Chernobyl nuclear reactor exploded, and then 25,000 residents were evacuated using thousands of volunteers and 1,100 buses from Kiev over a period of just 3 hours, clearing a zone of 10 km radius around the reactor. Later, evacuation was increased to a 30 km radius, evacuating 100,000 people.

#### Chamberlain, the Nobel Peace Prize Winner

Prime Minister Neville Chamberlain's appeasement of the Nazis and repeated meetings with Hitler followed family pacifist politics: the 1925 Nobel Prize for Peace was awarded to Neville Chamberlain's half-brother Sir Austin Chamberlain (1863-1937), who was the British Secretary of State for Foreign Affairs from 1924-29:

**"Together with Aristide Briand of France, [Austin] Chamberlain and Stresemann met at the town of Locarno in October 1925 and signed a mutual agreement (together with representatives from Belgium and Italy) to settle all differences between the nations by arbitration and never resort to war. For his services, Chamberlain was not only awarded the Nobel Peace Prize, but was made a Knight of the Order of the Garter. [Austin] Chamberlain also secured Britain's accession to the Kellogg-Briand Pact, which theoretically outlawed war as an instrument of policy. [Austin] Chamberlain famously said that Italian dictator Benito Mussolini [a fascist who later fought with the Nazis] was 'a man with whom business could be done'."**

Neville Chamberlain followed Austin Chamberlain's appeasement and paper-signing with Mussolini and in the Kellogg-Briand Pact outlawing war, fruitless delusions which were hyped a success for peace following the 1925 Nobel Peace Prize. In reality, of course, even the Nazi Adolf Hitler himself was nominated for the Nobel Peace Prize after a lying propaganda speech about non-aggression! Prizes just reflect groupthink, which may either be justified or just wishful thinking. No quantity of newspaper propaganda, political hand shaking or autographs on treaties, or Nobel Peace Prizes justify surrender to thugs: hot air deters no evil.

John Wheeler-Bennett's history, *Munich: Prologue to Tragedy* (Macmillan, London, 1948) - unlike other histories of appeasement - cites John F. Kennedy's 1940 book *Why England Slept* in the bibliography at page 491, and conveys the lessons Kennedy derived. Other, more grandiose and revisionist historians like A. J. P. Taylor, ignored such contemporary analyses, or maybe they could not spot them from the astounding heights of their ivory towers. **Taylor's *Origins of the Second World War*** was a brief refutation of **Churchill's own Nobel Prize-winning history of the war**, which Taylor thought biased. Churchill had warned of Nazi rearmament and racism and been ignored until it was too late to avert war; A. J. P. Taylor aligns his history more closely to Hitler's 1930s propaganda that he was just trying to do the best for Germany, ending unemployment, defending against enemies, etc. Hitler certainly wanted to put Germany first, and he was happy to get what he wanted by intimidation at the negotiating table rather than dropping bombs. Taylor's position is basically that of Chamberlain's. He sees Hitler as an opportunistic politician, not a monster. Wheeler-Bennett, pages 268-9:

**"Mr Chamberlain ... essentially a business man ... could not conceive how any problem could possibly be settled by a recourse to arms ... . He was confident, therefore, that if certain compromises, certain business deals, could be arrived at ... the Dictators in Berlin and Rome would not have to go to war ...**

"... It must, however, be remembered that in 1935 / Mr Chamberlain's attitude to peace and war was very representative of the national reaction of Britain. ...

"... Lord Trenchard's warning in the House of Lords of thousands of planes dropping in a few hours more bombs than were dropped during the entire period of the First World War [*House of Lords Debates*, 18 November 1936, column 214]; the gloomy picture drawn by the author of *War over England* [by Air Commodore Lionel Charlton, published in London, 1936] of the horrors of London during an air raid; the widely publicized theories of the Italian General Douhet [General Giulio Douhet, *The Command of the Air*, London, 1927], describing a *Blitzkrieg* of the air which would paralyse a country at the outbreak of war – struck a chill into the hearts of Londoners, who recalled Mr Baldwin's disheartening statement [in November 1932] that 'the bomber will always get through'."

This is Kennedy's point: you can't place all of the blame on Chamberlain because it was a collective failure and a collective delusion of Britain in general: the public, the newspapers, and even Winston Churchill's efforts to alert everyone. Churchill failed during the early to mid 1930s to have the Nazis stopped before World War II was inevitable (i.e. while British armaments still exceeded the Nazis). The reasons why Churchill failed – i.e. why Britain as a whole decided to "shoot the messenger" (rather than shoot Hitler) in the 1930s – are vitally important if we are to learn lessons of Churchill's failure in public relations when warning of a real threat. Churchill's evidence for the Nazi threat did not prove credible enough, while the exaggerations of what the Nazi air force would and could do to London were wrongly accepted as being honest. Directly quoting a passage from Kennedy's book, Wheeler-Bennett states on page 269:

"Like a boxer who 'cannot work himself into the proper psychological and physical condition for a fight that he seriously believes – and hopes – will never come off', the British people could not think themselves into the necessary state of mind for real preparedness because they hoped so dearly that they would never be called upon to fight. [Reference: *Why England Slept*, by John Kennedy, New York, 1940, p. 157.]"

This is exactly why civil defense was needed politically to credibly deter thugs, in order to counter the doom mongering exaggerations of weapons effects by showing that simple countermeasures provide useful protection. It's important to now turn to the Nazi Germany. Why wasn't Hitler stopped before becoming so powerful as being able to sustain years of world war? Wheeler-Bennett provides the answers. The world economic collapse of 1929 caused a great depression in 1930-31 that allowed existing pacifist sentiments in the West to be translated into large cutbacks on armament spending, while at the same time causing unemployment in Germany, creating public sympathy for Hitler's policies. The two effects together led to tragedy. On page 230, Wheeler-Bennett points out:

"In Britain it has become axiomatic to associate the policy of appeasement almost exclusively with the names of Mr Neville Chamberlain and Lord Halifax. It should, however, be remembered that Mr Chamberlain only became Prime Minister in May 1937 and Lord Halifax did not take charge of the Foreign Office until February 1938. For the greater part of the period between 1933 and 1938 the Prime Minister of Great Britain was either Mr Ramsey MacDonald or Mr Stanley Baldwin ...

"... In an honest but fatal endeavour to achieve universal disarmament, successive Governments had reduced the armaments of Britain to a point at which many believed them to be no longer compatible with the demands of national defence, in the vain hope that others would be moved to emulate such an example of unilateral rectitude."

The actual reductions in the British armed forces budget were not immense by themselves (the £116 million budget of 1926-7 was cut to £110 million in 1930-1), but in the context of Hitler's rearmament of Germany, they were a problem. Moreover, in November 1932 former and future British Prime Minister Stanley Baldwin declared in public that everyone must know "that no power on earth can protect him from being bombed". Hitler made no secret of his racism and intentions for territorial expansion, which he published in his book *Mein Kampf* before election, but Wheeler-Bennett points out on page 235 that Britain and France chose to turn a blind eye and appease Hitler anyway:

"There was general agreement not to take seriously the blue-print of *Mein Kampf*, with its clear warning that France must be first isolated and then annihilated."

This convenient "groupthink" consensus of delusion persisted even after 14 October 1933, when Germany withdrew from the Disarmament Conference in Geneva and from the League of Nations. On page 243, Wheeler-Bennett states:

"Within a week of the withdrawal of Germany from Geneva, the leader of the Labour Party, Mr George Lansbury, declared that he would 'close every recruiting station, disband the Army, dismantle the Navy, and dismiss the Air Force. I would abolish the whole dreadful equipment of war and say to the world, 'Do your worst'. [*The Star*, 23 October 1933.]"

Churchill pointed out the problem with this in 1934, but as Wheeler-Bennett states on page 244, he was ignored:

"... Mr Churchill called the attention of the House to the existence in Germany of 'an illegal air force rapidly approaching equality with our own'. [*House of Commons Debates*, 28 November 1934, columns 866-9.] This Mr Baldwin vehemently denied, although he admitted that an air force did exist in Germany. He assured the House that there was neither 'menace' nor 'emergency', and 'that Germany's air strength was not 50% of our strength today'. [*Ibid.*, column 883.]"

Instead of using this superiority in 1934 as a first-strike coercion to stop the illegal Nazi rearmament while there was still time to avoid a world war, the opportunity was squandered for fear of a relatively small preventative war. Notice here that no pacifist Cold War literature has ever addressed this vital point, not even with a silly dismissal: it is just ignored completely, or the situation in later years such as at Munich in 1938, is discussed instead when the Nazis had some longer-range bombers available. Such a preventative war in 1934 (not 1938) would have been truly small-scale and would have nothing like World War II, as Wheeler-Bennett argues on page 245:

“Yet the very fact that illegal rearmament was in progress in Germany should surely have sent Mr Baldwin to the country in a campaign, similar to that which Mr Churchill was waging single-handed, with the object of arousing the British people to an awareness of danger on the Rhine, which he himself had admitted to be Britain’s frontier in Europe. Instead, he applied the soothing syrup of statistics to the first awakening cries of the British public, and lulled them back into the fitful slumber of their false security.”

British public opinion as a result of this is known from the National Peace Ballot of 1935, as Wheeler-Bennett explains on pages 248-9:

“The results of this mass interrogation, published on June 27, disclosed that 11.5 million people took part in it, and that the overwhelming majority were for disarmament. ... The Peace Ballot made no mention of rearmament ... But there was no disputing the fact that the results of the ballot constituted a serious political lobby in Britain, perhaps the first since the agitation on the Corn Laws. It was a demonstration in favour of disarmament ... despite the defection of Germany. As such it had to be taken seriously by the Government.”

Wheeler-Bennett was author of the 1932 history, *Disarmament and Security since Locarno*. Unlike modern historians who see everything with the benefit of hindsight, Wheeler-Bennett studied the events as they occurred without prejudice, and he checked the prevailing contemporary claims by using the declassified state archive papers presented at the Nuremberg Trials. In his Introduction to *Munich: Prologue to Tragedy* (pages 3-8) Wheeler-Bennett sets appeasement in context:

“Surrender to blackmail is always damnable because it sets a higher value upon mere self-protection than upon principles, which, in fact, we know to be sacred and inviolable. Such appeasement is justly condemned because it is felt to be an act of treason against all we stand for – the purchase of life at the expense of those ultimate ends of which the pursuit alone makes life worth living. ...

“Under the shadow of the then unparalleled ravages of the First World War, the peace-makers of Paris sought to repair the damage suffered by the machinery for pacific settlement, to strengthen and extend it beyond all previous limits, and to obviate the errors of the past by recognising the truth that, since peace is indivisible, so must the means of preserving it be indivisible. Under the Covenant of the League of Nations, the principle was acknowledged, for the first time, that a wrong done against one State constituted a wrong against all, and it was hoped that, by the over-all guarantee of the League against aggression, a potential aggressor would be deterred from committing his contemplated crime. ... Japan, Italy, and Germany committed their acts of aggression unchecked and unpunished. ... Mr Anthony Eden voiced the popular opinion of the majority when he declared, that ‘nations cannot be expected to incur automatic military obligations save for areas where their vital interests are concerned’. [I.e., each nation was only prepared to fight for its survival if directly attacked, and was not prepared to go to war to help another country, thereby allowing the fascist thugs to invade and swallow up smaller countries, building up ever more strength, without opposition from stronger countries. Eden’s policy is the opposite of the Good Samaritan. Eden later as Prime Minister in 1956 mishandled Foreign Policy during the Suez Crisis of 1956.] ...

“What, then, is the answer, since all must be agreed that ‘to avoid war must be the highest ambition of statesmanship’?”

“It lies surely, first, in the proposition that disarmament must follow – and not precede – the establishment of an effective system of security; that never again must any peace-loving Power become so weak that, either individually or in alliance with others, it is unable to say ‘No’ to a potential aggressor at the earliest symptom of his aggressive designs; that it should have it within its power to insist that disputes be settled in equity and justice. ‘The concessions of the weak are the concessions of fear,’ declared Edmund Burke in 1775, and this is as profoundly true today as it was one hundred and seventy five years ago. Appeasement – a necessary and invaluable card in the game of diplomacy – must be played from strength and never from weakness.

“The answer lies, secondly, in that, having the necessary force at our disposal, we should arrive at a broader recognition of our ‘vital interests,’ and a realization that the most vital of all, our way of life, to which we have ever pledged ‘our lives, our fortunes and our sacred honour,’ may be threatened by events farther afield than we are at first disposed to perceive.

“It was not for Belgium or for Serbia that we fought in 1914; it was not for Czechoslovakia that we might have fought in 1938; it was not for Poland that we fought a year later; it was in defence of a principle, in the words of Mr Duff Cooper, ‘that one Great Power should not be allowed, in disregard of treaty obligations, of the laws of nations and the decrees of morality, to dominate the continent of Europe’. In defence of this principle we have fought many times in the past and must be prepared to fight again in the future, for on the day when we are not prepared to fight for it we shall have forfeited our liberties, our independence, and all the hopes and ideals which we have ever cherished.

“Appeasement, then, must ever stop short of this point. But how to realize in time that the point has been reached? How to prevent Europe from again being plucked like an artichoke, leaf by leaf, until we ourselves remain the tastiest morsel of all – *le fond d’artichaut*?

“To this question the answer was given one hundred and forty years ago: ‘Expressions like “The fate of this or that part of Europe does not concern us” or “we limit ourselves to the maintenance of order in such-and-such an area” and so on should never again pass the lips of a ruler or statesman. ... The more vigorously and courageously injustice and force are attacked at their first appearance, the less often will it be necessary to take the field against them in battle’.” [Quoted from: Friedrich Gentz, *A History of the Balance of Power in Europe*, 1805.]



“These words, written in the face of Napoleonic aggression ... are still true today. Their purport is clear beyond misunderstanding ... In an imperfect world ... evil, predatory instincts, national passions and hatreds, will continue to exist. Appeasement has its rightful and appropriate place in the solution of problems ... but is inadmissible in dealing with aggression.

“Has the world learned its lesson ... ?”

### Michael Foot and Appeasement

Michael Foot (1913-2010) died on 3 March 2010. He led the British Labour Party to defeat in 1983 by adopting a policy of unilateral nuclear disarmament which was unpopular. **Wikipedia states:**

**“Associated with the Labour left for most of his career, he was a passionate supporter of the Campaign for Nuclear Disarmament and British withdrawal from the European Economic Community. A passionate orator, he was Labour leader at the 1983 general election when the party received its lowest share of the vote since 1918.”**

The point is, Foot was one of the three authors of *Guilty Men*, a best-selling (200,000 copies sold in weeks) book published by Victor Gollancz in 1940 which named and shamed 15 British public figures for appeasing the Nazis in the 1930s, the “deliberate surrender of small nations in the face of Hitler’s blatant bullying”. Foremost was Chamberlain, who remained Prime Minister until May 1940.

Foot could condemn a policy of appeasement and disarmament in the face of the Nazi threat, but in the 1980s he did the opposite in the face of the much bigger nuclear threat from the Soviet Union. Why this hypocrisy, or why this change in his outlook? He didn’t understand the science of the effects of nuclear weapons, as proved by ignorant, gullible assumptions made **his own 1999 book, *Dr Strangelove, I Presume?***, where he falls hook, line and sinker for effects propaganda and ignores civil defence countermeasures even for the decreasing nuclear stockpiles and smaller weapon sizes in the MIRV technology and proliferation age; exactly the attitude of the appeasers of the 1930s whom he attacked in his 1940 book *Guilty Men*. He hadn’t learned the lesson of appeasement.

“When bad men combine, the good must associate; else they will fall one by one, an unpitied sacrifice in a contemptible struggle.”

– Edmund Burke, *Thoughts on the Cause of Present Discontents*, 1770.

“Thus, a people may prefer a free government, but if, from indolence, or carelessness, or cowardice, or want of public spirit, they are unequal to the exertions necessary for preserving it; if they will not fight for it when it is directly attacked; if they can be deluded by the artifices used to cheat them out of it; if by momentary discouragement, or temporary panic, or a fit of enthusiasm for an individual, they can be induced to lay their liberties at the feet even of a great man, or trust him with powers which enable him to subvert their institutions; in all these cases they are more or less unfit for liberty; and though it may be for their good to have had it even for a short time, they are unlikely long to enjoy it.”

**- John Stuart Mill, *Considerations on Representative Government*, 1862.**

**Above:** politicians could ban nuclear weapons, if they raised taxes enough to pay for the conventional arms and conscripted armies needed to replace them, possibly bankrupting democracies in the process just like the Soviet Union. Progress in making the world more secure needs more courageous political efforts than giving up nuclear weapons. Example:

Dr Alvin M. Weinberg, *The Control of Exposure of the Public to Ionizing Radiation in the Event of Accident or Attack*, Proceedings of a Symposium Sponsored by the National Council on Radiation Protection and Measurements (NCRP), April 27-29, 1981, Held at the International Conference Center, Reston, Virginia. Appendix B: Civil Defense and Nuclear Energy, pages 275-7:

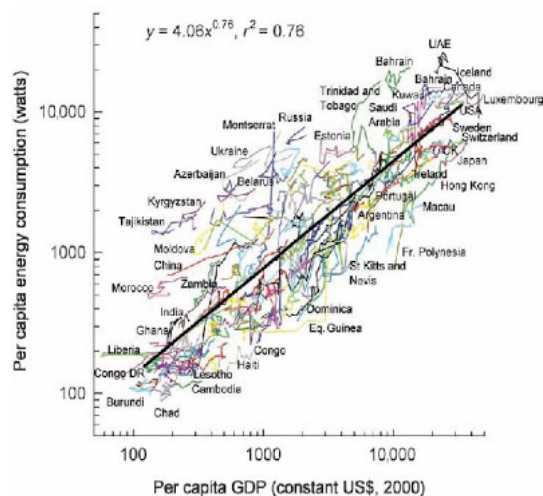
'Nuclear power is an instrument of peace because it reduces pressure on oil. The energy crisis is primarily a crisis of liquid fuels. Insofar as nuclear power can replace oil, it helps stabilize the world order.

'The world today uses about 60 million barrels of oil per day; of that, about 18 million barrels per day came through the Straits of Hormuz before the Iran/Iraq war. A nuclear reactor of 1,000 megawatts electric output uses the equivalent of about 25,000 barrels of residual oil per day. If the world had 1,000 reactors operating now, the primary energy supplied by uranium to those 1,000 reactors would exceed 18 million barrels of oil per day that go through the Straits of Hormuz. To be sure, the substitution is not direct, since what would be displaced is residual oil, not gasoline or other higher distillates. But with an expenditure of about \$10-15 thousand per daily barrel of capital equipment, refineries could convert the residual oil into higher distillates [i.e., break the longer hydrocarbon molecules into smaller ones]. So to speak, residual oil, made available by conversion from oil-fired to nuclear power plants, is the best feedstock for a synthetic fuel plant. To make high distillates from coal requires an expenditure of about \$100,000 per daily barrel. To make high distillates from residual oil takes only about one tenth as much. ...

'This simple-minded argument cannot be ignored: substitution of nuclear energy for oil reduces the pressure on oil and therefore reduces the political pressures that lead first to political instability, then to war, and possibly eventually to nuclear war. We forget that the immediate cause of the Japanese attack on Pearl Harbor was the decision by the United States to prevent Japan from moving into Indonesia to get oil. The Japanese entry into World War II demonstrated how oil can trigger a world conflagration. ...

'I do not know whether nuclear energy, which is now in a state of moratorium [following Three Mile Island controversy in 1979], will get started again. ... That people will eventually acquire more sensible attitudes towards low level radiation is suggested by an analogy, pointed out by William Clark, between our fear of very low levels of radiation insult and of witches. In the fifteenth and sixteenth centuries, people knew that their children were dying and their cattle were getting sick because witches were casting spells on them. During these centuries no fewer than 500,000 witches were burned at the stake. Since the witches were causing the trouble, if you burn the witches, then the trouble will disappear. Of course, one could never be really sure that the witches were causing the trouble. Indeed, though many witches were killed, the troubles remained. The answer was not to stop killing the witches - the answer was: kill more witches. ...

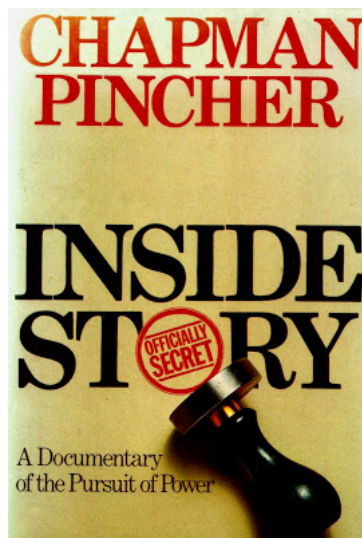
'I want to end on a happy note. The Inquisitor of the south of Spain, Alonzo Frias, in 1610 decided that he ought to appoint a committee to examine the connection between witches and all these bad things that were happening. The committee could find no real correlation ... So the Inquisitor decided to make illegal the use of torture to extract a confession from a witch.'



**Above: correlation between wealth and energy consumption from the Oil Drum.** Heresy of heresies: not only is the peace/environmental/free love movement making war more likely (just as it did in the 1930s) by lying about the effects of weapons and the effects of war, but it's also making the world more dangerous by **false attacks on radiation effects from nuclear power**, which make economic pressures more sensitive to oil prices. **Plutonium proliferation expert Dr Alexander DeVolpi discusses how supposedly antinuclear crusaders having been using false politics dressed up as science to argue against plutonium demilitarization in his blog post linked here.** Another environmentally-friendly and science-friendly option to **even more efficiently dispose of plutonium is of course simply to use the plutonium for cheap, healthy, safe, fast, reliable space travel by putting the Project Orion research of Professor Freeman Dyson and Dr Theodore Taylor into operation.** As we saw above, President Reagan used oil prices as a leverage to coerce Gorbachev into setting in place freedom-inclined political changes, which led ultimately to the collapse of the Soviet Union. The world is today in the opening stages of a financial crisis akin to the 1929 Great Depression: it's occurring more slowly and with less panic. But there are still immense debts, and the full effects have not been felt yet. As with the Great Depression, it will take a few years before the full problem becomes apparent. As the diagram above indicates, there is a correlation between wealth and energy consumption. The correlation is really much better than the diagram shows, because almost all of the scatter of the data points is due to climatic variations. Thus, wealthy countries in a cold climate use more power for heating to stay warm than wealthy countries with a warm climate. But the key point is that wealth and energy consumption are closely correlated. Run out of economic oil, and you are in a crisis. The historical method of dealing with such crises to seize or otherwise secure oil supplies, either directly or via intimidation when the risks of not doing so outweigh the risks of war.



**Above:** David Low's cartoon from the London *Evening Standard*, 30 October 1945. Britain freely gave America the secret to the **cavity magnetron**, a small whistle-type electron resonator that efficiently produced the high power microwaves needed for airborne radar and associated defense gadgets (and microwave ovens after the war). Britain also supplied scientists for the Manhattan Project (although they included the spy Dr Klaus Fuchs). Despite this, Britain was banned from access to the wartime nuclear secrets after the war. Instead, on 27 October 1945, President Truman announced 12 points of American peaceful intentions, and promised not to share nuclear secrets with anybody else. Relying on nuclear deterrence allowed a massive reduction in Western conventional military power during the Cold War, helping the West to prosper economically, while the Soviet Union went broke. The dropping of the first nuclear bomb on Hiroshima on 6 August panicked Stalin into declaring war on Japan on 7 August, which the Americans had been begging for since the Yalta conference with Stalin. In this indirect way, Hiroshima added extra political pressure on Japan's leaders by taking away their last ditch hope of Russian assistance in brokering a more favorable conditional surrender with America. Nagasaki was the last straw. Unfortunately this success of nuclear weapons, achieved in carefully staged surprise attacks against highly flammable wood frame cities in dry August weather, inspired great efforts by Russia to emulate American efforts in secret in 1949, leading to similar efforts in Britain (again in secret, with no democratic debate). Nuclear proliferation continues unabated while nuclear weapons effects are grossly exaggerated by lying politicians and media warmongers who claim to be lying for peaceful disarmament!



**Above:** journalist Chapman Pincher's sad book on the British manipulation and secrecy behind the greasy pole climbers of our supposedly "democratic" politics, *Inside Story: A Documentary of the Pursuit of Power* (Sidgwick and Jackson, London, 1978) gives much useful background to the demented politics and science abuse in British government politics. The biggest scandal was former German commie physicist **Dr Klaus Fuch's** flawed security vetting by MI5 before he was sent by Britain to Los Alamos, and the U.S. Congress used this to ban postwar nuclear cooperation with Britain until after we had independently tested thermonuclear weapons in the late 1960s. However, the real fault, Pincher explains on page 72, was largely down to the failure to detect his "handler" in America, **Anatoli Yakovlev**, "who worked under the cover of being a vice-consul at the Soviet consulate in New York. It was his highly professional planning which allowed untrained spies like Fuchs and **David Greenglass**, an American soldier who worked at Los Alamos, to betray secrets of the atomic bomb's detailed structure. It was his control over the spy network, laboriously built up by colleagues, which enabled American couriers like Harry Gold and Julius Rosenberg to pick up not only nuclear secrets for despatch to Moscow but many others, including radar developments.

"Only the stupidity of some Russian delegates to United Nations discussions on the control of atomic energy in 1947 eventually led to the exposure of Yakovlev and his agents. They referred to secret American techniques and even used code-words which alerted the American delegation, led by the admirable Bernard Baruch, to the existence of serious leakages. It took the FBI a long time to track down all the traitors. By that time Yakovlev, who was called as defendant on a capital charge of espionage in New York's Southern District Court on 15 March 1951, had fled home to Russia."

Pincher also provides a very useful analysis of the descent of the British Labour Party into pro-commie unilateral nuclear disarmament policies during the 1970s (**which for some reason seems to be glossed over on the Labour Party website history pages**). During the 1930s, the Labour Party (particularly at the local council level) was pro-disarmament and anti-civil defence, backing the rival Conservative government of Prime Minister Chamberlain on appeasement of Nazi thugs. When Labour won the 1945 election, former pacifist and appeaser Clement Attlee became Prime Minister and reversed his 1930s viewpoint, and in 1947 he secretly ordered Dr William Penney to build nuclear weapons! As the Cold War developed with the Berlin Crisis (1948) and Korean War (1950-3), the Labour Party clamped down on its left-wing and banned communists until 1973. Pincher records on pages 326-7 that in 1972 the Labour Party:

"sent a delegation to Moscow headed by its General Secretary, Ron Hayward, who stated on his return that 'We believe this visit has built a firm foundation for understanding and friendship between our two parties'. ... The most dangerous symptom in the eyes of the security authorities [MI5, MI6] was the Labour Party's decision in 1973 to lift its ban on its members belonging to Communist and Communist-front organizations, which had been in force previously to avoid infiltration ... It meant that members of the Labour Party, including MPs, were free to join organizations such as the British-Soviet Friendship Society, the International Union of Students, the British Peace Committee, and the World Peace Council, which has its headquarters in Moscow.

"Labour MPs and even ministers are free to appear on Communist Party platforms and do so. They write in the Communist newspaper, the *Morning Star*, and ... their Communist sympathies are used for Soviet propaganda purposes. The most blatant of these recently was the broadcast made by Alex Kitson, a member of the Labour Party National Executive representing the party at the 1977 celebrations of sixty years of Communist dictatorship in Moscow. He told the Russians, 'You have managed to achieve so much that we are still far from achieving,' with other remarks so contrary to the truth that even some of his extremist friends felt he had gone too far, in view of the thousands suffering in Soviet labour camps and so-called mental institutions. ... The Communists like to latch on to the word 'Labour' just as they latched on to 'Peace', which always means 'Peace at Russia's price'."

Pincher adds on page 328 that former Labour MP **Woodrow Wyatt** "was so appalled with the sell-out to the Left that in 1977 he published a book, *What's Left of the Labour Party?*, urging Labour voters to support the Tories for at least two elections so that Labour should be forced into the wilderness to cleanse itself."

That's exactly what they did. Pincher explains on page 324 why the 1980s Labour policy of relying on conventional weapons to prevent another World War is wrong:

"Those who cry for unilateral nuclear disarmament but not for total disarmament, because they concede that some kind of defence is necessary, assume that a conventional war fought against Russia would somehow be tolerable. Information to which I have had access indicates that a further global war could be devastating to civilization whether fought with conventional weapons or with [cheaper] H-bombs.

"In the first place, the pattern of big wars fought with automatic weapons, which were used for the first time in the American Civil War, shows them to be exhausting conflicts lasting at least four years. In addition to huge combat and civilian casualties, enormous numbers die from cruelty and malnutrition. Deaths inflicted in 'great' wars have risen exponentially ..."

Making the world "safe" for conventional war means mobilizing a large conscription army and diverting a massive amount of money into keeping it trained and ready for a surprise attack. If that's what the pacifists want from nuclear disarmament, they will make society far more militaristic and increase defence spending enormously,

just as occurred for America during the Vietnam conflict, where more bombs were dropped than in any other war in human history, but led to a very costly failure!

The reason why Britain's Labour Party adopted unilateral nuclear disarmament as a major 1983 election promise has less to do with the smoke and mirrors of pacifism and nuclear weapons effects, than appeasement of the Soviet Union. Pincher explains this in chapter 35, "The Unions as a Power Base", where he writes on pages 329-30:

"The Labour government under Wilson and more so under Callaghan has realized that securing continuing union support is the best insurance against electoral defeat. As a result, legislation to increase union power has been pushed through by Labour, which expects union loyalty in return. The Trade Union and Labour Relations Act and the Employment Protection Act have strengthened the rights of union members but the real increase in power has been put into the hands of the trade union leaders and the TUC [trade union council]. Even the Advisory Conciliation and Arbitration Service (ACAS) set up to help resolve disputes, is so organized as to lean heavily in favour of the unions, as a succession of industrial and commercial organizations has discovered. ... during the last few years of the reign of Jack Jones as General Secretary of the Transport and General Workers' Union many regarded him as the most influential man in Britain. ... the TUC worked in the closest collaboration with Michael Foot's Employment Department in formulating the new pro-union laws. ... In August 1974 Hugh Scanlon, then General Secretary of the Amalgamated Union of Engineering Workers, threatened a winter of industrial chaos if Labour failed to win the next election.

"In the motor car industry, where strike action is orchestrated, trade unionists have shown repeatedly that they are prepared to damage the nation's economy for political motives and have largely succeeded ... As soon as the decision to close the [British Leyland union paralyzed Speke, Liverpool] factory was made, the seventeen-week strike was called off and then attempts were made to spread the dispute to Coventry and elsewhere 'in sympathy'. ... The National Executive Committee of the Labour Party which formulates party policy ... is dominated by the trade unions because 60 percent of its members are from unions or are among the 119 MPs sponsored by unions ...

"It is not surprising therefore that British Communists ... decided long ago that their surest road to political power was by infiltrating the unions. ... Out of a total work force of about 23 million, some 10 million are members of trade unions and of these only about 0.3 percent are members of the Communist Party. Yet they are exerting pressure out of all proportion to their representation. An analysis by Geoffrey Stewart-Smith in 1974 showed that about 10 percent of all officials of the major industrial trade unions were Communists or far-left revolutionary Marxists. ... Those who care about freedom should never forget that, at whatever level Communism has been established anywhere in the world, it has almost always been imposed by quite small minorities."

This is the dictatorial mechanism. On page 333, Pincher writes that **National Union of Miners leader, Arthur Scargill, member of the Young Communist League from 1955 to 1962 (who famously clashed with Prime Minister Thatcher on the question of union power later, in the 1980s)** destroyed the Prime Minister Heath's Conservative government by the 1973 disruption resulting from the miners' picketing the Saltley coke depot in Birmingham. Scargill told Pincher:

"Saltley, where the police gave in because they couldn't cope with so many pickets preventing lorries taking coke to factories, was a historic day for the trade union movement and for me. It showed that the people could win against authority by sheer weight of numbers."

The problem with this "people could win against authority" argument is that there are tens of millions of people in the country, and the fact that tens of thousands of well-organized pickets can overwhelm the police doesn't prove that they are right, or that they are a majority. Scargill is certainly right to believe that the majority is often wrong, misled, duped by lies from politicians, and exploited by corrupt capitalists out to line their own pockets at the expense of the hard done by workers. But that doesn't mean that industrial action to force management to increase pay is the best solution. The whole capitalist system simply falls apart because the shareholders and fat cat bosses still want to take home their disproportionate bonuses, so the company either goes bankrupt or else has to shrink and lay off workers, to be able to afford to pay the remaining workers higher wages! This *increases inequality*, rather than reducing it. In the longer term, the company closes because it simply becomes uncompetitive compared to cheaper labour in foreign markets like China.

The way forward is not industrial action, but simply the **compulsory Nationalisation of greedy big businesses**, with minimal compensation to them and their greedy shareholders (which would eventually have a slight deterrent effect on immorally greedy despots). This could provide a good safeguard against the exploitation of workers by leaders drawing immense undeserved bonuses at their expense. **Britain used to oscillate between socialist "Clause 4" public ownership pro-Nationalisation Labour Governments and pro-privatisation Conservative Governments**. Each successive Government would squander billions undoing and reversing the costly policies of its predecessor, Nationalization of key industries by Labour would be followed by Privatisation by Conservatives, and so on, in a costly and fruitless oscillation. What is needed is a fact-based, not dogma-based, decision on which industries need to be in the public ownership, and which are best left to private enterprise with wealthy shareholders reaping the profits. As a simple rule of thumb, private enterprise makes sense for small local businesses like retail, serving a limited number of customers who have ample choice and competition to regulate prices fairly; while **public ownership makes more sense for the banking sector where the taxpayers have to bail out the banks when they gamble with their customer's money (the retail sector is not protected in this way by the taxpayers)**. Apart from the banking sector, the legal profession also urgently needs to be nationalised by all democracies that believe in equality under the law: the present system is unjust because the rich can hire teams of lawyers who can spend longer preparing cases, finding legal loopholes, and so on, than the poor:

**"Try pressing a lawyer on whether they think, say, the murderer really did or didn't do it. They won't say. They don't care. They're genuinely not interested. All that matters to them is whether or not the crime's alleged perpetrator was or wasn't found 'guilty under law'. For them, you see, the criminal justice system has absolutely nothing to do with right and wrong. It's ... whether they ... got their guilty-as-sin client off on the right technicality ... They actually believe in their warped imaginations that they have a claim to the moral high ground; that even as they make more and more work for themselves, leeching off society's misfortunes and claiming a greater and greater share of our money, they are genuinely making the world a better, more civilized place."**

- James Delingpole, *How to be right*, Headline, London, 2007, pp. 92-3.

**"The inherent vice of capitalism is the unequal sharing of blessings. The inherent virtue of Socialism is the equal sharing of miseries."**

- Winston Churchill, speech during House of Commons debate on Demobilisation", 22 October 1945.

**"... Socialist governments traditionally do make a financial mess. They always run out of other people's money."**

- Margaret Thatcher, Thames TV programme "This Week", 5 February 1976.



## NHS: DAVID CAMERON URGED TO BACK PATIENTS' VOUCHERS



Neuro surgeon Vladimir de Rothschild, 65, has sent his revolutionary proposals to Cabinet ministers

Recommend Be the first of your friends to recommend this.

Sunday February 27, 2011

By James Murray

Have your say(10)

DAVID Cameron is being asked to introduce a voucher system for patients in an attempt to save billions from the NHS budget.

Neuro surgeon Vladimir de Rothschild, 65, has sent his revolutionary proposals to Cabinet ministers telling them the scheme would give greater power to patients and improve services.

The 'Sunday Express' understands that the Prime Minister is taking an interest in the suggestions and wants them seriously analysed.

Dr de Rothschild, who has an international reputation as a plastic surgeon for developing a unique way of treating varicose veins, has taken the idea from Germany, but has tailored the concept to adapt to reforms already being planned for the NHS, including the abolition of primary care trusts.

In his scheme all patients would be given a booklet of vouchers to cover GP and consultant appointments and hospital treatment, including surgery. The vouchers could also be used for dental appointments and eye tests.

It is thought the system would reduce the number of time wasters who go to surgeries because there would be more scrutiny on the reasons for visits and people would naturally be concerned about using up vouchers.

**Above: Brilliant neuro surgeon Dr Vladimir de Rothschild has suggested a modification to Britain's National Health Service (NHS) to make the service more equal and cut out some of the time-wasters.** When WWII ended, Churchill lost the 1945 general election because he wanted to quickly repay the enormous debt from lend-lease to America, while the public wanted a time of prosperity, so the socialists got into power and claimed that WWII had *not been a fight against the racism of Hitler but really just a collaboration with Stalin's U.S.S.R. in the name of social equality*. As a result, **the NHS was set up by Health secretary Aneurin Bevan in 1948**, while food rationing continued into the 1950s. To be sure, the social situation in Britain was deplorable before the welfare state, with the genuine poor and needy forced to rely on the vagaries of charity (which tends to fail when most needed, for example after a world economic crisis such as that set off by the 1929 Wall Street crash). My mother was a state registered NHS nurse for her whole career. As **Delingpole points out, the problem with any kind of state control quango is that customer service is replaced by the expected supplication of the patient to the state worker**, since the customer is forced to pay taxes for a fixed service with no real choice. If you don't get good service, you can't readily get a meaningful tax refund and take your business elsewhere. You must take it or leave it. *All power corrupts, and this kind of state quango power can in severe cases corrupt even medics, especially while they are overloaded with patients, many of whom are time wasters.* So an attitude develops akin to some of the socialist tendencies in the U.S.S.R., where faith in the system is gradually undermined as the system is abused, then the system hardens itself and loses some of its humanity. The job of making any state quango system work forever without the spur of competition or the rewards of the private sector should not be underestimated. Public service can be flogged. We're not saying that the NHS should be privatised, but that it **should be improved with common sense incentives**.

**Dr de Rothschild envisages that more consultants will start up small clinics in the coming years and would welcome the voucher system as a way of boosting their incomes. He said: "At the heart of my proposals is the idea of effectively devolving spending power to the patients, rather than NHS managers or even GPs. The Government's current proposals in the Health Bill see control over 80 per cent of NHS budgets pass to GPs, but I believe even more savings can be made by letting patients decide where money is spent via the voucher system."**

**A small error in Dr de Rothschild's voucher idea is giving more power and patients to popular practices. Actually, there is limit to how many people they can treat, so as with choice on popular state schools, you'll just end up with a decades-long waiting list for them, which will change nothing. Thus, effort must focus on motivating poor practices to be more efficient and become more popular, not the mistake of trying to flood the better practices with too many patients! Effort must be focussed on driving up efficiency and cutting waiting lists everywhere, by treating the patients who need treatment more quickly, and incentivising people to do more exercise, eat more sensibly, and drink less alcohol to reduce some of the most pointless time-wasting accidents, disease, and thus unnecessary sicknesses.**



**Above:** in the 1970s, state control planned to nationalize everything and control everything from the top, including scientific research and production. This was opposed by the campaigns like "Beware of the Elephant" (this advert is from *The Guardian* 9 Aug 1974 p5), which warned of the dangers from state control. Stalin admitted in his own book, *Economic Problems of Socialism in the USSR*, that the basic laws of nature are the same in free capitalist countries and socialist dictatorships, leading to stagnation, hubris, corruption, and other symptoms from the bloated, short-sighted elephant of state control unless the leadership is continuously fighting wars or innovating (Stalin pressed forward with nuclear power and space rockets and public criticisms were tempered; the bankruptcy of the USSR in the 80s when Reagan and others set up Star Wars/SDI and W-79 neutron bombs to negate the Soviet SS-20s and Warsaw Pact tank superiority, effectively ended the USSR dream of world domination so criticism of the regime's short-sighted hubris became harder to censor out and dissent became more openly fashionable).

A good discussion of the anti-profit problem of Marxist socialism (not full communism, but then even the USSR never went fully communist in Marx's sense) in Britain in the 1970s before the 1979 Trade Union-driven "winter of discontent" (which backfired by ushering in Mrs Thatcher), is given by Sir Keith Joseph, then the Conservatives' shadow Home Secretary and former chair of Bovis, in a speech at Leith on 8 August 1974 which was published on page 15 of the *The Guardian*, Friday 9 August 1974 (the same issue of the paper containing the "Beware of the Elephant" campaign advert, shown above):

#### "Why British industry is on its knees

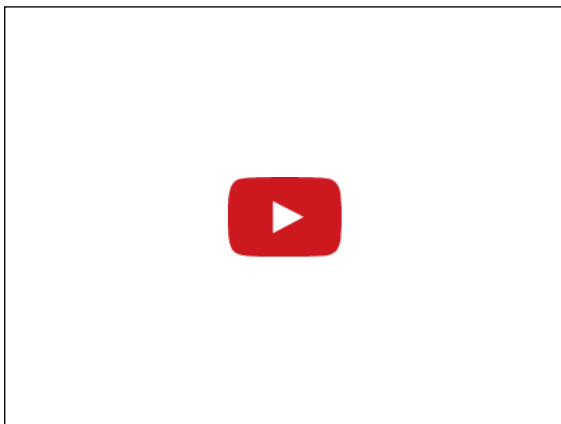
"In those countries which are our successful competitors, the prestige of industry – ownership and management – is high. Industrialists and managers are recognised as the real creators of wealth, as the men on whose shoulders the whole economy is carried, whose efforts provide employment, find the taxes [corporation tax, etc.] to pay for schools, defence, welfare, whose dividends underpin pensions, insurance policies, and savings.

"In Britain, a large proportion of political and intellectual opinion-formers are convinced that we can dispense with profits. ... No wonder that their utterances and actions alike are so self-contradictory, and that industry suffers. Trade unions suffer from the same politico-economic split personality. As economic men, they want private firms to be healthy and profitable, to be able to afford good wages and conditions for their workers. But as political animals they want to fight capitalism, bash the bourgeoisie, usher in state capitalism, even though they know that the state is a bad employer, which over-mans, underpays, uses the public sector as an economic regulator, and generally depends on Treasury handouts for improvement of wages.

"The fact of the matter is that politicians have over-estimated the ability of government to do good by intervention. We politicians have been guilty of hubris: it is British industry on which nemesis has been visited. We have no right to tell the industrialists: 'Find your own way out,' while we are standing on their lifeline. We must get off it.

"Moreover, a substantial part of industrial and other equities are held by institutions – pension funds, insurance companies, small investors through unit trusts. One study suggests that 85 percent of all families are to a greater or lesser extent dependent on the yield of securities. What would happen if there were wholesale failures of companies in which such institutions have invested? ... The liquidity crisis is on us. One firm after another will go to the banks for loans to top up working capital, but loans will add to costs [interest] and cannot be unlimited. Once some companies begin to falter, the effects could be incalculable."

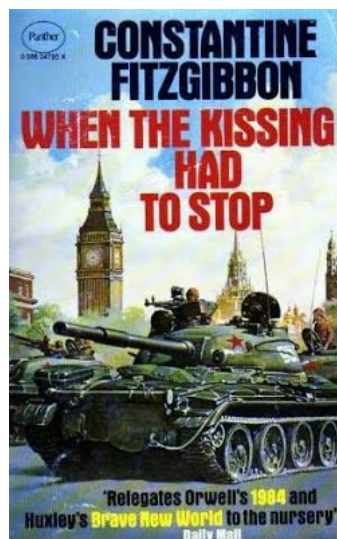
This is the mechanism for the tipping-towards-economic-collapse and recession in economies where there is too much state-sector fat, living off the excessive taxation of the private sector, in the Marxist pipe-dream that profitability is the root of all evil. Firms lose profitability. They have to downsize, or they borrow from the bank. Eventually they struggle with the interest payments and are stopped by the banks from borrowing more money to pay the interest, especially if interest rates start to rise significantly. Then the government falls because the private sector is not longer profitable enough (or completely bankrupt) to pay enough tax to fund the bloated and unprofitable state sector, so the government is in a debt crisis:



#### The left, the liberal, and the right: nuclear science in politics

The socialist soft left as well as the communist hard left came from the ideas of Marx, which were cast a fatal blow by the 1989-92 overthrow of the USSR, by the British "New Labour" (indistinguishable from Conservatives, except for total financial ineptitude), and by the adoption of militant Capitalism by the "communist" Chinese. In the past, the left had towards their left the USSR, a utopian promised land of justice and decency. Now that the utopia has been shown for the fraud it always was, all the left have left is their union stranglehold on (1) the Labour party and (2) the media and its dangerous lying blatherings presented as deep, sincere, fact-based profundity about hot air (CO2 induced climate change), nuclear radiation, nuclear weapons, and other vital foundations for the preservation of democratic civilization. The left have always been a dictatorship of falsehood ideology dressed up as social justice, yet in fact has always used the methods of injustice, censorship, and aristocratic authority to stamp upon the facts and the messengers of those facts. If and when this last fortress of lefty fascism is burned to the ground, the lefty lies of Marx will be consigned to the dustbin of pseudoscientific idealisms, in the company of the eugenic Nazism of *Mein Kampf*. The fascism of both will survive for a while as it does in Capitalist imperial China, as political dictatorship dressed up as democracy, and intolerance towards dissent. However, at some stage this fascism will be exposed for the bigotry it is. The sooner someone does this, the sooner genuine reform of socialism can commence, and the sooner it can move away from squandering Britain's resources, and acquiring massive debt that undermines defences required for national security, by pandering to undemocratic geriatric dictatorial public sector union dodos. The left needs to be made to realize that in a democracy, when it loses an election after effectively bankrupting the country, it is

undemocratic to then try to use its union influence and contacts to cause strife to bring down those elected!



**Above:** for American readers who are unaware of the political Marxist/communist significance of the British Labour Party's unilateral nuclear disarmament policy decision for the 1983 General Election under its lefty CND affiliated leader Michael Foot, the 1960 novel *When the Kissing Had to Stop* by Constantine Fitzgibbon (the translator of the 1958 book on Hiroshima and Nagasaki radiation scare mongering effects, *Formula for Death*), sets the scene nicely. It was reprinted in 1971 and 1978. It tells the story of Marxist biased trade union power in the Labour Party achieving political victory in Britain by promising to close American nuclear bases in Britain, exploiting the Kremlin's peace propaganda machine nuclear war scare-mongering for politically-corrupt power-seeking ends, e.g. London to Aldermaston marches and CND propaganda. The popular idealism of the CND nuclear scare-mongering backed disarmament of Britain (to avoid any risk of nuclear war) is a cynical front for Moscow to get the removal of the nuclear deterrent from Britain, making way for its sinister "peaceful" invasion of Western Europe. Simultaneously it was able to push its Marxist fellow-travellers into power, making Britain the next Soviet satellite state member in much the same sneaky undemocratic way that Britain has ended up an European Union member. Having thrown out American bases from Britain, the few democrats left end up as revolutionaries, fighting a Red Army occupation to try to avoid being ruthlessly oppressed by Soviet tanks, the gulag, and punishment in Siberian salt mine chain gangs. It was written after Khrushchev's suppression of the 1956 Hungarian Revolution. Fitzgibbon joined the Irish Guards when Britain declared war on Germany in September 1939, but then transferred to the U.S. Army in December 1941 when America declared war on Germany because his father was Irish, but his mother was American.

Despite having first tested its own fission bomb in 1952 and H-bomb in 1957, Britain remained reliant during the entire Cold War on the Pentagon's deployment of additional nuclear weapons on British soil to bolster the deterrence of the USSR. The USSR constantly tried, through its "Lord Haw Haw"-like nuclear war scare-mongering Moscow-based and Kremlin-controlled "World Peace Council" to have the neutron bomb and other USSR tank deterrents stopped. It aimed to get Britain to disarm and send home the Americans, so it could be either "peacefully" occupied via a socialist revolution in Whitehall, or else a "conventional" war using the enormous conscription Red Army of the USSR. The conventional armed forces of the Red Army were tested by Brezhnev in Afghanistan in 1979, and eventually were opposed by the Americans under Fred Ikle in the Reagan Administration, who supplied the Taliban with stinger missiles to shoot down Red Army helicopters.

MARTIN CEADEL *New College, Oxford*

## The First Communist 'Peace Society'

The British Anti-War Movement  
1932–1935

Communists have often attempted to influence authentic peace societies in Britain, as in other countries. For example, in the 1920s they attempted to penetrate the No More War Movement (NMWM), a socialist-pacifist body, and since 1960 they have been a conspicuous element within the Campaign for Nuclear Disarmament.<sup>1</sup> But their limited success has led them also to set up their own organizations, while seeking to portray these as independent of Party control. The best known have been the movement which staged a People's Convention in London on 12 January 1941, while the Nazi-Soviet Pact was still in force, and the British Peace Committee, which was launched at a congress in October 1949 as part of the efforts of the World Peace Council to undermine the recently concluded North Atlantic Treaty and remained active for many years.<sup>2</sup> However, the first such peace front organization has been surprisingly neglected, even by historians with a special interest in recording or denigrating communist activities,<sup>3</sup> and the patchiness of the surviving evidence means that such

<sup>1</sup> Douglas Hyde, *I Beloved: The Autobiography of a Former British Communist* (1950) p. 35; Richard Taylor, *Against the Bomb: The British Peace Movement 1940–1960* (Oxford, 1980) pp. 215–23, and Paul Byrne, *The Campaign for Nuclear Disarmament* (London, 1986) pp. 114–15.

<sup>2</sup> James Hinton, 'Killing the People's Convention', *Bulletin for the Society for the Study of Labour History* 20 (Autumn 1970) pp. 27–32; *Report for Peace: Report of the British Peace Congress 22–23 October 1949* (London, n.d.).

<sup>3</sup> It is regarded by Norman Swettenham, *History of the Communist Party of Great Britain 1927–1941* (London, 1982) and Paul Merritt, *Peace of the Dead: The Truth behind the Nuclear Disarmament* (London, 1986).

**Above:** Martin Ceadel's article, "The First Communist 'Peace Society': The British Anti-War Movement 1932–1935", *Twentieth Century British History*, volume 1, 1990, pp. 58–86, states: "Communists have often attempted to influence authentic peace societies in Britain, as in other countries. For example, in the 1920s they attempted to penetrate the No More War Movement (NMWM), a socialist-pacifist body; and since 1960 they have been a conspicuous element within the Campaign for Nuclear Disarmament [CND]. ... The best known have been the movement which staged a People's Convention in London on 12 January 1941, while the Nazi-Soviet Pact was still in force, and the British peace Committee, which was launched at a congress in October 1949 as part of the efforts of the [Moscow, Kremlin-affiliated] World Peace Council to undermine the recently concluded North Atlantic Treaty ..."



**Above:** James Delingpole is author of the excellent book about fanatical fascism today, *Watermelons*, a reference to the fact that these national socialist dictators (Hitler was a "National Socialist" dictator) are green on the outside and red on the inside, like watermelons, intent on burning down new Reichstag's (just like Hitler did) to declare a "state of emergency" (world nuclear holocaust, or **hot air/global warming myths**), in order to "justify dictatorship" and banning/shooting all critics:

**“Herman Kahn’s *On Thermonuclear War*, published in 1960, was important and unpopular because it revealed the glaring discrepancies between the theory of assured destruction and the actual course of events in the real world. Kahn also annoyed people by speaking plainly of killing and cancer instead of using the customary euphemisms. ... His worries always seemed to me misplaced and exaggerated. ... Failing to convince him that his worries were unfounded, I ended by saying, ‘Oh, it’s no use talking with you. You’re paranoid.’ ‘Of course I’m paranoid,’ he replied cheerfully. ‘Didn’t you know that? I make it my business to be paranoid. You had to be paranoid in 1933 to believe Hitler would exterminate the Jews, and you had to be paranoid in 1941 to believe the Japanese would attack Pearl Harbor.’ Kahn’s criticism of the assured destruction strategy was based on historical analogies which may or may not be valid. But he was right in stressing the incompatibility between the assumption of rational behavior upon which the theory of assured destruction is based and the many examples of irrational, paranoid, and unpredictable action which fill the pages of history.”**

**- Professor Freeman Dyson, *Weapons and Hope*, Harper and Row, N.Y., 1984, Chapter 19, Assured destruction, page 242.**

“Escalation can succeed, if it either helps crush the enemy’s forces, or if it brings about a change in the enemy’s government favorable to a settlement ... the atomic bombing of Hiroshima and Nagasaki ... broke the political power of the die-hard faction in Tokyo.”

- Fred C. Ikle, *Every War Must End*, Columbia University press, N.Y., revised ed., 1991, p. 55.

“In the present as in the past, there are basically two ways to prevent war: by eliminating the sources of conflict that would lead a nation to resort to the use of arms, and by rendering the use of arms so unattractive that a nation would rather tolerate existing conflicts or frustrations than start a war.”

- Fred C. Ikle, *Every War Must End*, Columbia University press, N.Y., revised ed., 1991, p. 108.

“I must make one admission, and any admission is formidable. The deterrent does not cover the case of lunatics ...”

- Sir Winston Churchill, House of Commons, 1 March 1955.

posted by Nuclear Weapons Effects 9:13 a.m.

9 COMMENTS:

At 11:17 a.m., Anonymous said...

Excellent read friend, you mention it quite often but I can't seem to get the link to work for the pdf "Capabilities of nuclear weapons" by Dolan. Any tips? I'll come back next week and see if you reply.  
Keep up the good work.

At 7:15 a.m., nige said...

Anonymous, move cursor over selected chapter (below) and click the right mouse button, then select "Save Target As" (if you are using Windows). That will allow you to see the speed the download is occurring at, allowing diagnosis of any problems. The Adobe PDF file reader is freely available at <http://get.adobe.com/uk/reader/>

(It will be slow sometimes due to the fluctuating load on the bandwidth of wordpress's hosting servers: they host many blogs.)

The version of Dolan's EM-1 below is July 1972 as revised to pages Change 2 of August 1981 (apart from Dolan's new rainout prediction model from August 1981, which they didn't release; but SRI reports by Dolan and the 1977 ENW suggest its basis). I think it should be entirely re-typeset in the original format and published as the factual basis for civil defense. I think this could be done quickly with the help of OCR software.

#### Capabilities of Nuclear Weapons, DNA-EM-1

Philip J. Dolan (Editor), Stanford Research Institute

July 1, 1972

Change 1: July 1, 1978

Change 2: August 1, 1981

**Part 1. Phenomenology.**

**PDF download of Part 1, preliminary pages and contents pages, Change 2, August 1981 (45 pages, 1.6 MB)** These pages are **also available here**.

Chapter 1. *Introduction*. 30 pages.

Chapter 2. *Blast and Shock Phenomena*. 306 pages. **Blast wave section is here** and **ground shock/cratering/water bursts/underwater bursts section is here**.

Chapter 3. *Thermal Radiation Phenomena*. 114 pages.

Chapter 4. *X-Ray Radiation Phenomena*. 30 pages.

Chapter 5. *Nuclear Radiation Phenomena*. 151 pages.

Chapter 6. *Transient-Radiation Effects on Electronics (TREE) Phenomena*. 16 pages.

Chapter 7. *Electromagnetic Pulse (EMP) Phenomena*. 40 Pages.

Chapter 8. *Phenomena Affecting Electromagnetic Propagation*. 94 pages.

At 7:46 a.m.,  nige said...

**Part 2. Damage Criteria.**

**PDF download of Part 2, preliminary pages and contents pages, Change 2, August 1981 (50 pages, 1.7 MB)**

Chapter 9. *Introduction to Damage Criteria*. 187 Pages.

Chapter 10. *Personnel Casualties*. 38 Pages.

Chapter 11. *Damage to Structures*. 50 Pages.

Chapter 12. *Mechanical Damage Distances for Surface Ships and Submarines Subjected to Nuclear Explosions*. 147 Pages.

Chapter 13. *Damage to Aircraft*. 81 Pages.

Chapter 14. *Damage to Military Field Equipment*. 46 Pages.

Chapter 15. *Damage to Forest Stands*. 64 Pages.

Chapter 16. *Damage to Missiles*. 121 Pages.

Chapter 17. *Radio Frequency Signal Degradation Relevant to Communications and Radar Systems*. 32 pages.

**Appendices A-F. 112 pages.**

**Contents of *Capabilities of Atomic Weapons*, U.S. Armed Forces Special Weapons Project, Washington, D.C., technical manual TM 23-200, November 1957, Confidential (declassified in 1997)**

**Preliminary pages****Part 1: Physical Phenomena**

**Section 1: Introduction (13 pages)**

**Section 2: Blast and Shock Phenomena (95 pages)**

**Section 3: Thermal Radiation Phenomena (19 pages)**

**Section 4: Nuclear Radiation Phenomena (87 pages)**

**Part 2: Damage Criteria**

**Section 5: Introduction (21 pages)**

**Section 6: Personnel Casualties (20 pages)**

**Section 7: Damage to Structures (54 pages)**

**Section 8: Damage to Naval Equipment (15 pages)**

**Section 9: Damage to Aircraft (11 pages)**

**Section 10: Damage to Military Field Equipment (23 pages)**

**Section 11: Forest Stands (15 pages)**

**Section 12: Miscellaneous Radiation Damage Criteria (10 pages)**

**Appendices.**

At 4:06 p.m.,  Anonymous said...

I disagree with your take on Prime Minister Chamberlain. He just wanted to help the Nazis. What's wrong with that?

The guy at least tried to get peace with Hitler! All Churchill wanted was not jaw, jaw but war, war.

If Chamberlain had simply shot his cabinet and continued appeasing Hitler after September 1939, we might all be living in a peaceful Thousand Year Third Reich now.

Peace is good, war is bad. That's what Chamberlain said, and he was right. People who fight for freedom are cowards.



True, 75% of the population of Hiroshima survived the bomb and the firestorm. But I think we should still disarm so that terrorists and aggressors don't feel threatened by us.

We're guaranteed to be safe and secure if we surrender to an aggressor. It's the sensible thing to do. Give peace a chance, again! Maybe the next Hitler won't want to kill the Jews, but some other group instead, so it will be OK?

"A weapon is a danger, even to its owner."

- Nazi propaganda proverb.

"Death makes you free."

- Nazi propaganda proverb.

*At 4:46 p.m., @nige said...*

Anonymous,

Chamberlain wasn't a Nazi. He just didn't know weapons effects and believed lies from his military and his pacifist half-brother and other nutters who profited by lying very well, with knighthoods and Nobel Peace Prizes.

Chamberlain's crime was not trying to get peace. It was incompetence, it was keeping from public debate the "secret" classified weapons effects lies that exaggerated Nazi weapons capabilities and led to appeasement and thus World War II.

Chamberlain's crime was believing liars. It's interesting that the military lies about the Nazi threat in the 1930s served the military well, just as they served the pacifist 1930s "ban the bombs" movement that continued campaigning for disarmament in the belief that having weapons would make Britain a target for Nazi bombers!

The same occurred during the Cold War. The military bigwigs had no real interest in cutting down thermal effects exaggerations in the popular media, because exaggerations of nuclear effects resulted in politicians giving them (not civil defense!!!!) more money to build more bombs! The lie that there is no defense possible, and that the only thing you can do is to purely invest more and more money building up your military, served the interests of the military-industrial complex very well during the Cold War.

I'm not saying that we should cut back on the military, I'm just saying that we should be more honest and think about the fact that if something goes wrong, and terrorists or evil dictators do use nuclear weapons, and the people are "sitting ducks" and don't duck and cover (etc.) to minimize injuries from flash burns, flying glass, wind drag, fallout, etc., then a lot of misery will be caused.

Civil defense is cheap. It's just handing out information, and debunking lying anti-civil defense propaganda from CND. It's not a billion dollar expensive shelter building program. Shelters were no use in Hiroshima or Nagasaki because people weren't in them! Forget that, and focus on taking advantage of modern city buildings, taking advantage of modern weather forecasts for accurate fallout prediction, using existing modern technology to cheaply and efficiently reduce suffering. **Think Plastic Wrap as Wound Dressing for Thermal Burns**, that kind of simple, helpful first aid improvisation against burns wounds that could otherwise be contaminated with fallout and turn lethal ...

There is an interesting paper about policy (not science) aspects of British civil defence history:

**UK Nuclear History, Working Paper Number 2, UK Civil Defence and Nuclear Weapons 1953 – 1959, by Robin Woolven,**  
[http://www.mcis.soton.ac.uk/Site\\_Files/pdf/nuclear\\_history/Working\\_Paper\\_No\\_2.pdf](http://www.mcis.soton.ac.uk/Site_Files/pdf/nuclear_history/Working_Paper_No_2.pdf)

**Page 28 states:**

**"In the 1957 Defence Debate ... [Harold] Macmillan in particular highlighted the shortcomings in the approach of the Labour Party speakers. In his memoirs he recorded: 'Since the Defence White Paper makes it clear that all our defence – and the economies in defence expenditure are founded on nuclear warfare, it throws the Socialists into still greater confusion. ... it would be a mistake to believe that 'banning the bomb' - even if it could be agreed and effectively policed – would solve the problem of European security. I went on to observe: "I have been through two major wars fought by conventional weapons. Some people now talk as if those were quite harmless and quite respectable operations. [Hansard 17 April 1957]".' "**

*At 5:02 p.m., @nige said...*

[continued]

Similar sentiments were expressed in 1980s U. K. Parliamentary debates reported in Hansard!

Almost every time nuclear disarmament was debated, the statement was made by some MP or Lord, quite rightly, that "we cannot make Europe safe for conventional war, which isn't a tea party!"

If you look at nuclear weapon designer Samuel T. Cohen's 1983 book, *The Truth About the Neutron Bomb*, he prints pictures of Korea after conventional warfare, utterly destroyed.

Getting rid of nuclear weapons will just make our society more militaristic, because we'll go back to conventional weapons arms races, and conventional weapons need far more aircraft and personnel to deliver them than compact nuclear weapons. They're also very costly: Vietnam shut down human exploration of the Moon. They couldn't afford to do both.

Another factor is that the nuclear disarmers need to think about conscription. Are they willing to be conscripted if we ban the nuclear bomb? Are they willing to fight a conventional war, very likely a *one sided* conventional war (in which the other side will use nuclear weapons against them)? If they want to ban nuclear weapons, they have to recognise what the effects of that will be. It will give a new impetus to enemies to get the banned weapons and threaten to use them. It will mean that, not having any nuclear deterrence, we will have to go back to conscripting a massive army, and the first day of the Battle of the Somme will look like a picnic by comparison to the kind of situation that will then be possible. Conventional warfare effects can be much worse than nuclear warfare, as Cohen's book makes plain. Or else we wave a white flag and surrender. Your choice. Just don't try to lie about the consequences of the various options available!

At 5:19 p.m.,  nige said...

*Making Europe Safe for Conventional Warfare*

See "Defending Post-INF Europe" by Jeffrey Record and David B. Rivkin, Jr., *Foreign Affairs*, Spring 1988:

"A substantial denuclearization of Europe is at hand. ... Critics and skeptics, among them Richard Nixon, Henry Kissinger, Alexander Haig, Congressman Jack Kemp (R-N.Y.), recently retired NATO Supreme Commander General Bernard Rogers and House Armed Services Committee Chairman Les Aspin (D-Wis.), contend that any degree of denuclearization of Europe not tied in some way to a redress of the conventional military balance, which continues to favor the Soviet Union, could make Europe safe for conventional warfare on a scale not witnessed since 1945.

"Even partial denuclearization, it is asserted, would work against NATO by removing many of the very weapons that the alliance for almost forty years has judged an effective and comparatively cheap means of deterring the Soviet Union's use of its numerically superior and geographically advantaged conventional forces in Europe."

<http://www.foreignaffairs.com/node/43070>

I don't necessarily agree with this particular evaluation, but I do point out that it shows that nuclear disarmament is accepted to increase the threat of more devastating conventional warfare. Generally, 1 kt of conventional weapons randomly scattered over a city has similar blast effects to a single 1 Mt explosion, hence 0.1% nuclear efficiency. That's why we don't build bigger and bigger nuclear weapons, weapons design has been evolving for lower yields with effects (like the ground shock from the earth penetrator warhead) tailored for specific purposes, not general "collateral damage" which has never been a desired effect because of the influence of the weather on the thermal and fallout effects!

At 6:59 p.m.,  nige said...

See also the "Yes, Prime Minister" nuclear deterrent episode video clip linked here about nuclear disarmament and its replacement with conventional weapons plus conscription...

[http://www.youtube.com/watch?v=IX\\_d\\_vMKswE&feature=related](http://www.youtube.com/watch?v=IX_d_vMKswE&feature=related)

At 7:22 p.m.,  nige said...

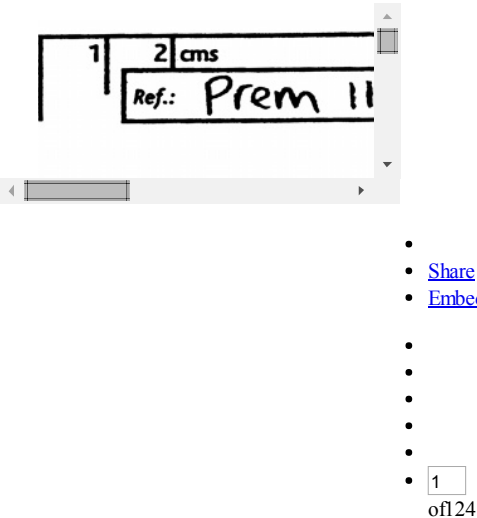
and the video:

<http://www.youtube.com/watch?v=DUzRJfAc-HU>

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CONVENTIONAL WARS HAVE KILLED TENS OF MILLIONS OF PEOPLE, NUCLEAR WEAPONS CAN RAPIDLY DETER TH TO PEACE WITH MINIMAL CASUALTIES. 'During the critical period 8-15 February [1968], the U.S. command realize[ed] conventional] bombing was not sufficiently effective. ... The air campaign dropped over 110,000 tons of bombs a the area around Khe Sanh during the 77-day siege ... the most heavily bombed target in the history of conventio W. C. Yengst, S. J. Lukasik, and M. A. Jensen, *Nuclear Weapons that went to War*, SAID report DSWA-TR-97-25, Sep (quoted in the 2015 book by the secret *Capabilities of Nuclear Weapons* editor, Dr Harold L. Brode, *Nuclear Weap War*, page 287). [British Nuclear Test Civil Defence Research](#)



CHANGE 1

Field Manual No 101-31-1

**NUCLEAR WEAPONS EMPLOYMENT  
DOCTRINE AND PROCEDURES**

**Radius of vulnerability (emergency risk criterion: 5%)**

Figure 54. Radii of Vulnerability.

CATEGORY	PERSONNEL (LL) IN— (Based on Governing Effect)				
	Open	Open Foxholes	APCs	Tanks	Earth Shelter
Yield (KT)					
Radii listed are distances at which a 5 percent incidence of effect occurs. HOB used is 60W <sup>1/3</sup> meters.					
(Distances are in meters)					
0.1	700	600	600	500	300
1	1200	900	900	800	500
10	3200	1300	1300	1250	900
20	4000	1500	1450	1400	1000
100	8000	1900	1800	1800	1400
200	12000	2000	1900	1900	1500
300	14000	2100	1950	1950	1600

Protective  
area of  
area of

Example: fa  
factor of op  
(14,000)<sup>2</sup>/(2

Open Open  
Foxhol

1 1.36  
1 1.78  
1 6.06  
1 7.11  
1 17.7  
1 36.0  
1 44.4

Calculation of the injury-averting protective factors by simple open function of weapon yield. Most countermeasures are relatively ineffectual against strategic nuclear weapons with yields of 100, 200 and 300 kt.

The definition of protective factor used here is the factor by which countermeasures reduce the risk of injury.

Richard P. Feynman, 'This Unscientific Age', in *The Meaning of It All*, Penguin Books, London, 1998, pages 106-9:

'Now, I say if a man is absolutely honest and wants to protect the populace from the effects of radioactivity, which is what his friends often say they are trying to do, then he should work on the biggest number, not on the smallest number, and he should point out that the [natural cosmic] radioactivity which is absorbed by living in the city of Denver is so much more serious than the smaller doses from nuclear explosions] ... that all the people of Denver ought to move to lower altitudes.'

"If a man reads or hears a criticism of anything in which he has an interest, watch ... if he shows concern with any question, he will be sure to find a way to answer it."

*it true?' he thereby reveals that his own attitude is unscientific. Likewise if ... he judges an idea not on its merits but on the authority of the author of it; if he criticizes it as 'heresy'; if he argues that authority must be right because it is authority ... The path paved with critical doubt, and lighted by the spirit of objective enquiry... the majority of people have resented what seem to have been purely matters of fact ... nothing has aided the persistence of falsehood, and the evils resulting from it, nor the unwillingness of good people to admit the truth ... the tendency continues to be shocked by natural comment, and to hold too 'sacred' to think about. ... How rarely does one meet anyone whose first reaction to anything is to ask: 'is it true?' is a man's natural reaction, it shows that truth is not uppermost in his mind, and unless it is, true progress is unlikely.*

- Sir Basil Henry Liddell Hart, *Why Don't We Learn from History?*, PEN Books, 1944; revised edition, Allen and Unwin, 1972.

*Civil defense countermeasures, to be taken seriously by the population, require the publication of solid facts with the evidence to support those facts against political propaganda to the contrary. Secrecy over the effects of nuclear weapons hinders plutonium and missile production by rogue states, but it does hinder civil defense countermeasures, by permitting propaganda to go unopposed (see linked post, here).*

Terrorists successfully prey on the vulnerable. The political spreading of lies concerning threats and the alleged 'impossible' countermeasures, terrorizing the population in order to 'justify' supposedly pro-peace disarmament policies in the 1920s in the secret rearmament of fascist states which were terrorizing the Jews and others, eventually leading to World War II.

Political exaggerations about nuclear weapons effects today:

(1) encourage terrorist states and other groups to secretly invest in such weapons to use either for political intimidation against countries which have no countermeasures, and

(2) falsely dismiss, in the eyes of the media and the public, cheap relatively effective countermeasures like civil defense.

Therefore, doom-mongering media lies make us vulnerable to the proliferation threat today in two ways, just as they led to wars:

(1) Exaggerations of offensive technology and a down-playing of simple countermeasures such as trenches, encouraged states to start World War I in the false belief that modern technology implied overwhelming firepower which would render quickly on the basis of offensive preparedness: if the facts about simple trench countermeasures against shelling and during the American Civil War had been properly understood, it would have been recognised by Germany that a long war of attrition in munitions production and logistics would be necessary, and war would have been seen to be likely to lead to German defeat by countries with larger overseas allies and colonies that could supply munitions and the other resources required to win a long war.

(2) Exaggerations of aerial bombardment technology after World War I led to disarmament 'supported by' false claims that it was impossible to have any defense against a perceived threat of instant annihilation from thousands of aircraft carrying gas bombs, encouraging fascists to secretly rearm in order to successfully take advantage of the fear and vulnerability caused by political disarmament propaganda.

Contrived dismissal of civil defense by Marxist "Cambridge Scientists Anti-War Group" bigots: (a) appeased war-mongers and (b) maximised war mortality rates. Idealism kills. Super effective, fully proof-tested, cheap civil defense makes nuclear war not credible to stop conventional war devastation by avoiding collateral damage, tit-for-tat retaliation and escalation.

Historically, it has been proved that having weapons is not enough to guarantee a reasonable measure of safety from terrorism and countermeasures are also needed, both to make any deterrent credible and to negate or at least mitigate the effects of a terrorist attack. People who wear seatbelts die in car crashes; some people who are taken to hospital in ambulances, even in peace-time, die. Sometimes, lifeboats cannot save lives at sea. This lack of a 100% success rate in saving lives doesn't disprove the value of everyday precautions and medicine. Hospitals don't lull motorists into a false sense of security, causing them to drive faster and cause more accidents. Little 'arguments' against ABM and civil defense are similarly vacuous.

'As long as the threat from Iran persists, we will go forward with a missile system that is cost-effective and proven. If the Iranian threat is removed, we will have a stronger basis for security, and the driving force for missile-defense construction in Europe will be removed.'

- President Obama, Prague Castle, Czech Republic, 4 April 2009.

Before 9/11, Caspar Weinberger was quizzed by skeptical critics on the BBC News program *Talking Point*, Friday, March 19, 1993. Caspar Weinberger quizzed on new US Star Wars ABM plans:

'The [ABM] treaty was in 1972 ... The theory ... supporting the ABM treaty [which prohibits ABM, thus making nations vulnerable to nuclear attack] that it will prevent an arms race ... is perfect nonsense because we have had an arms race all the time we have had the ABM treaty. The greatest increase in proliferation of nuclear weapons that we have ever had. ... So the ABM treaty preventing an arms race is to be expected.'

'You have to understand that without any defences whatever you are very vulnerable. It is like saying we don't like chemical weapons like gas attacks - so we are going to give up and promise not to have any defences ever against them and that of course then we are perfectly safe. ...'

'The Patriot was not a failure in the Gulf War - the Patriot was one of the things which defeated the Scud and in effect helped us win. One or two of the shots went astray but that is true of every weapon system that has ever been invented. ...'

'The fact that a missile defence system wouldn't necessarily block a suitcase bomb is certainly not an argument for not having a missile defence when a missile that hits can wipe out hundreds of thousands of lives in a second. ...'

'The curious thing about it is that missile defence is not an offensive weapon system - missile defence cannot kill anybody. A missile defence can help preserve and protect your people and our allies, and the idea that you are somehow endangering people by having a missile defence is nonsense.'

**defence strikes me almost as absurd as saying you endanger people by having a gas mask in a gas attack. ...**

‘President Bush said that we were going ahead with the defensive system but we would make sure that nobody felt we had offense because we would accompany it by a unilateral reduction of our nuclear arsenal. It seems to me to be a rather clear statement that missile defence system would mean fewer arms of this kind.

‘You have had your arms race all the time that the ABM treaty was in effect and now you have an enormous accumulation and increase in weapons and that was your arms race promoted by the ABM treaty. Now if you abolish the ABM treaty you are not going to get it; *you have got the arms already there* - and if you accompany the missile defence construction with the unilateral reduction of our arsenal then it seems to me you are finally getting some kind of inducement to reduce these weapons.’

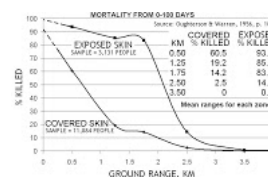
*Before the ABM system is in place, and afterwards if ABM fails to be 100% effective in an attack, or is bypassed by terrorism in a suitcase or in a ship, civil defense is required and can be effective at saving lives:*

‘Paradoxically, the more damaging the effect, that is the farther out its lethality stretches, the more can be done about it, because in power it covers vast areas, where small mitigations will save very large numbers of people.’

**- Peter Laurie, *Beneath the City Streets: A Private Inquiry into the Nuclear Preoccupations of Government*, Penguin,**

‘The purpose of a book is to save people [the] time and effort of digging things out for themselves. ... we have tried to leave the reader tangible – what a certain number of calories, roentgens, etc., means in terms of an effect on the human being. ... we must think of the writing for.’

**– Dr Samuel Glasstone, DSc, letter dated 1 February 1957 to Colonel Dent L. Lay, Chief, Weapons Effects Division, U.S. Special Weapons Project, Washington, D.C., pages 2 and 4, concerning the preparation of *The Effects of Nuclear Weapons*,**



Glasstone and Dolan stated in *The Effects of Nuclear Weapons* (1977), Table 12.17 on page 546, that the median distance for survival after 20 days was 0.12 miles for people in concrete buildings and 1.3 miles for people standing outdoors. The median distances for survival in modern city buildings and in the open differed by a factor of 11 for Hiroshima; the difference was thus a factor of  $11^2$  or about 120. Hence, taking cover in modern city buildings reduces the casualty rates and the killed by a factor of 120 for Hiroshima conditions, contrary to popular media presented political propaganda that civil defense is hopeless. This would reduce 120,000 casualties to 1,000 casualties.

From Dr Glasstone's *Effects of Nuclear Weapons* (1962/64 ed., page 631): ‘At distances between 0.3 and 0.4 mile from Hiroshima the average survival rate, for at least 20 days after the nuclear explosion, was less than 20 percent. Yet in the concrete office buildings, at these distances, almost 90 percent of the nearly 800 occupants survived more than 20 days; died later of radiation injury. Furthermore, of approximately 3,000 school students who were in the open and unshielded ground zero at Hiroshima, about 90 percent were dead or missing after the explosion. But of nearly 5,000 students in the buildings who were shielded in one way or another, only 26 percent were fatalities. ... survival in Hiroshima was possible in buildings that the overpressure in the open was 15 to 20 pounds per square inch. ... it is evident ... that the area over which protection is effective in saving lives is roughly eight to ten times as great as that in which the chances of survival are small.’

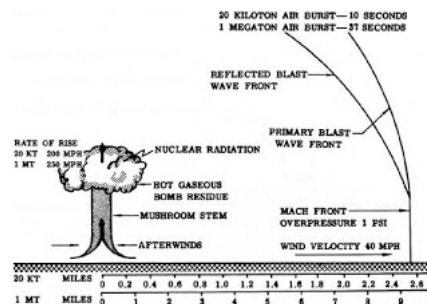
Lord Mayhew, House of Lords debate on Civil Defence (General Local Authority Functions) Regulations, Hansard, vol. 49, 1 November 1983: ‘... if there had been effective civil defence at Hiroshima probably thousands of lives would have been saved. Much human suffering would have been avoided. There is no question about it. ...’

Since the 1977 update by Glasstone and Dolan, extensive new updates to EM-1 for a further revised edition of *The Effects of Nuclear Weapons* have not actually been published with unlimited public distribution, due to President Carter's 1979 executive order which transferred responsibility for civil defense from the jurisdiction of the U.S. Department of Defense's Defense Civil Preparedness Agency to the Federal Emergency Management Agency (which is not an Agency of the U.S. Department of Defense, and is not concerned with the analysis of nuclear weapons test effects). However, the February 1997 U.S. Department of Defense's Defense Special Weapons / RDT&E Budget Item Justification Sheet (R-2 Exhibit) states that a revision of Glasstone and Dolan's unclassified *Effects of Nuclear Weapons* was budgeted for 1997-9:

‘FY 1997 Plans: ... Provide text to update Glasstone's book, *The Effects of Nuclear Weapons*, the standard reference for nuclear weapons effects. ... Update the unclassified textbook entitled, *The Effects of Nuclear Weapons*. ... Continue revision of the book, *The Effects of Nuclear Weapons*, the standard reference for nuclear weapons effects. ... FY1999 Plans ... Disseminate *The Effects of Nuclear Weapons*.’

The new publications are either classified or unclassified with limited distribution restrictions (e.g., Bridgman's *Introduction to the Effects of Nuclear Weapons*, which includes several chapters on nuclear weapons design to enable initial radiation output to be calculated precisely) which prevents up-to-date basic nuclear effects information to justify civil defense against the latest nuclear threats from being disseminated; the books are printed for use only by government agencies. The problem with this approach is that widespread public access to the best information for civil defense countermeasures is prevented.





'The evidence from Hiroshima indicates that blast survivors, both injured and uninjured, in buildings later consumed by fire [caused overturning charcoal braziers used for breakfast in inflammable wooden houses filled with easily ignitable bamboo furnishings and p generally able to move to safe areas following the explosion. Of 130 major buildings studied by the U.S. Strategic Bombing Survey ultimately burned out ... Of those suffering fire, about 20 percent were burning after the first half hour. The remainder were consumed some as late as 15 hours after the blast. This situation is not unlike the one our computer-based fire spread model described for De

- Defense Civil Preparedness Agency, U.S. Department of Defense, *DCPA Attack Environment Manual, Chapter 3: What the Know About Fire Ignition and Spread*, report CPG 2-1A3, June 1973, Panel 27.

*The Effects of the Atomic Bomb on Hiroshima, Japan, US Strategic Bombing Survey, Pacific Theatre, report 92, volu secret):*

Volume one, page 14:

"... the city lacked buildings with fire-protective features such as automatic fire doors and automatic sprinkler systems 28 state the heat flash in Hiroshima was only:

"... capable of starting primary fires in exposed, easily combustible materials such as dark cloth, thin paper, or dry rott to direct radiation at distances usually within 4,000 feet of the point of detonation (AZ)."

Volume two examines the firestorm and the ignition of clothing by the thermal radiation flash in Hiroshima:

Page 24:

"Scores of persons throughout all sections of the city were questioned concerning the ignition of clothing by the flash fi Ten school boys were located during the study who had been in school yards about 6,200 feet east and 7,000 feet west, from AZ [air zero]. These boys had flash burns on the portions of their faces which had been directly exposed to rays o boys' stories were consistent to the effect that their clothing, apparently of cotton materials, 'smoked,' but did not burn boy's coat ... started to smoulder from heat rays at 3,800 feet from AZ." [Contrast this to the obfuscation and vagueue *The Effects of Nuclear Weapons!*]

Page 88:

"Ignition of the City. ... Only directly exposed surfaces were flash burned. Measured from GZ, flash burns on wood pol at 13,000 feet, granite was roughened or spalled by heat at 1,300 feet, and vitreous tiles on roofs were blistered at 4,00 persons who had been in reinforced-concrete buildings within 3,200 feet of air zero stated that black cotton blackout cu ignited by radiant heat ... dark clothing was scorched and, in some cases, reported to have burst into flame from flash f the 1946 unclassified USSBS report admits, most immediately beat the flames out with their hands without sustaining the clothing was not drenched in gasoline, unlike peacetime gasoline tanker road accident victims]

"... but a large proportion of over 1,000 persons questioned was in agreement that a great majority of the original fires debris falling on kitchen charcoal fires, by industrial process fires, or by electric short circuits. Hundreds of fires were started in the centre of the city within 10 minutes after the explosion. Of the total number of buildings investigated [13: listed] 107 caught fire, and in 69 instances, the probable cause of initial ignition of the buildings or their contents was a direct radiated heat from the bomb (primary fire), (2) 8 by secondary sources, and (3) 53 by fire spread from exposed [ buildings."

'It is true that the Soviets have tested nuclear weapons of a yield higher than that which we thought necessary, but the bomb of which they spoke two years ago does not and will not change the balance of strategic power. The United State deliberately, to concentrate on more mobile and more efficient weapons, with lower but entirely sufficient yield ...' - Pr Kennedy in his television broadcast to the American public, 26 July 1963.

'During World War II many large cities in England, Germany, and Japan were subjected to terrific attacks by high-explosive and ir Yet, when proper steps had been taken for the protection of the civilian population and for the restoration of services after the bom little, if any, evidence of panic. It is the purpose of this book to state the facts concerning the atomic bomb, and to make an objecti analysis of these facts. It is hoped that as a result, although it may not be feasible completely to allay fear, it will at least be possible

- Dr George Gamow (the big bang cosmologist), Dr Samuel Glasstone, DSc (Executive Editor of the book), and Professor Hirschfelder, *The Effects of Atomic Weapons*, Chapter 1, p. 1, Paragraph 1.3, U.S. Department of Defense, September

'The consequences of a multiweapon nuclear attack would certainly be grave ... Nevertheless, recovery should be possible if plans carried out to restore social order and to mitigate the economic disruption.'

- Philip J. Dolan, editor of *Nuclear Weapons Employment* FM 101-31 (1963), *Capabilities of Nuclear Weapons* DNA-EM-

*Effects of Nuclear Weapons* (1911), Stanford Research Institute, Appendix A of the **U.S. National Council on Radiological Protection** symposium *The Control of Exposure to the Public of Ionising Radiation in the Event of Accident or Attack*, 1981.

‘Suppose the bomb dropped on Hiroshima had been 1,000 times as powerful ... It could not have killed 1,000 times as many people ... entire population of Hiroshima ... [regarding the hype about various nuclear "overkill" exaggerations] there is enough water in the ocean for everyone ten times.’

- **Professor Brian Martin, PhD (physics)**, 'The global health effects of nuclear war', *Current Affairs Bulletin*, Vol. 59, 1982, pp. 14-26.

In 1996, half a century after the nuclear detonations, data on cancers from the Hiroshima and Nagasaki survivors was published by the Radiation Effects Research Foundation, RERF (*Radiation Research* vol. 146 pp. 1-27; *Science* vol. 272, pp. 632-3) for 8 whom 60% had received bomb doses of over 5 mSv (or 500 millirem in old units) suffering 4,741 cancers of which only 420 were consisting of 85 leukemias and 335 solid cancers.

‘Today we have a population of 2,383 [radium dial painter] cases for whom we have reliable body content measurements. ... All [cancer] cases occurred in the 264 cases with more than 10 Gy [1,000 rads], while no sarcomas appeared in the 2,119 radium cases with less than 10 Gy.’

- **Dr Robert Rowland, Director of the Center for Human Radiobiology**, *Bone Sarcoma in Humans Induced by Radium*. *Response?*, *Proceedings of the 27th Annual Meeting, European Society for Radiation Biology, Radioprotection colloquium* (1997), pp. 331-8.

**Zbigniew Jaworowski**, 'Radiation Risk and Ethics: Health Hazards, Prevention Costs, and Radiophobia', *Physics Today* 41:89-90:

‘... it is important to note that, given the effects of a few seconds of irradiation at Hiroshima and Nagasaki in 1945, a threshold near that expected for leukemia and some solid tumors. [Sources: UNSCEAR, *Sources and Effects of Ionizing Radiation*, New York, 1992; Heidenreich, et al., *Radiat. Environ. Biophys.*, vol. 36 (1999), p. 205; and B. L. Cohen, *Radiat. Res.*, vol. 149 (1998), p. 525.] For lifetime natural exposure, a threshold may be set at a level of several thousand millisieverts for malignancies, of 10 grays for radium-induced cancer, probably about 1.5-2.0 Gy for lung cancer after x-ray and gamma irradiation. [Sources: G. Jaikrishnan, et al., *Radiation Research*, p. S149 (for natural exposure); R. D. Evans, *Health Physics*, vol. 27 (1974), p. 497 (for radium-226); H. H. Rossi and M. Zaide, *Environ. Biophys.*, vol. 36 (1997), p. 85 (for radiogenic lung cancer).] The hormetic effects, such as a decreased cancer incidence with increased longevity, may be used as a guide for estimating practical thresholds and for setting standards. ...

‘Though about a hundred of the million daily spontaneous DNA damages per cell remain unrepaired or misrepaired, apoptosis, differentiation, necrosis, cell cycle regulation, intercellular interactions, and the immune system remove about 99% of the altered cells. [Source: R. D. Evans, *Radiation Research*, vol. 152 (1999), p. 101.] ...

‘[Due to the Chernobyl nuclear accident in 1986] as of 1998 (according to UNSCEAR), a total of 1,791 thyroid cancers in children were registered. About 93% of the youngsters have a prospect of full recovery. [Source: C. R. Moir and R. L. Telander, *Seminars in Pediatric Medicine* vol. 3 (1994), p. 182.] ... The highest average thyroid doses in children (177 mGy) were accumulated in the Gomel region of Belarus where the incidence of thyroid cancer (17.9 cases per 100,000 children) occurred there in 1995, which means that the rate had increased by 25 since 1987.

‘This rate increase was probably a result of improved screening [not radiation!]. Even then, the incidence rate for occult thyroid cancer was a thousand times lower than it was for occult thyroid cancers in nonexposed populations (in the US, for example, the rate is 13,000 per 100,000 persons, and in Finland it is 35,600 per 100,000 persons). Thus, given the prospect of improved diagnostics, there is an enormous potential for detecting yet more [fictitious] "excess" thyroid cancers. In a study in the US that was performed during the period of active screening, it was determined that the incidence rate of malignant and other thyroid nodules was greater by 21-fold than it had been in the pre-1950s. [Source: Z. Jaworowski, *21st Century Science and Technology*, vol. 11 (1998), issue 1, p. 14.]’

‘Professor **Edward Lewis** used data from four independent populations exposed to radiation to demonstrate that the incidence of leukemia is linearly related to the accumulated dose of radiation. ... Outspoken scientists, including Linus Pauling, used **Lewis**’s risk estimate to argue about the danger of nuclear fallout by estimating the number of leukemia deaths that would be caused by the test detonations. In **Lewis**’s analysis of the radiation-induced human leukemia data was published as a lead article in *Science* magazine. In June he presented his findings to the Joint Committee on Atomic Energy of the US Congress.’ – Abstract of thesis by Jennifer Caron, *Edward Lewis and Radioactive Fallout: Impact of Caltech Biologists Over Nuclear Weapons Testing in the 1950s and 60s*, Caltech, January 2003.

Dr John F. Loutit of the Medical Research Council, Harwell, England, in 1962 wrote a book called *Irradiation of Mice and Men* (London: Chicago Press, Chicago and London), discrediting the pseudo-science from geneticist **Edward Lewis** on pages 61, and 78-79:

‘... Mole [R. H. Mole, *Brit. J. Radiol.*, v32, p497, 1959] gave different groups of mice an integrated total of 1,000 r of X-rays over 10 weeks. But the dose-rate - and therefore the radiation-free time between fractions - was varied from 81 r/hour intermittently to 1.3 r/hour continuously. The incidence of leukemia varied from 40 per cent (within 15 months of the start of irradiation) in the first group to 5 per cent compared with 2 per cent incidence in irradiated controls. ...

‘What **Lewis** did, and which I have not copied, was to include in his table another group - spontaneous incidence of leukemia (Brooklyn mice) who are taken to have received only natural background radiation throughout life at the very low dose-rate of 0.1-0.2 rad per year is listed as  $2 \times 10^{-6}$  like the others in the table. But the value of  $2 \times 10^{-6}$  was not calculated from the data as for the other groups; it was adopted. By its adoption and multiplication with the average age in years of Brooklyn mice - 33.7 years and radiation dose per year of  $0.1 \times 33.7 = 3.37$  rad, a mortality rate of 7 to 13 cases per million per year due to background radiation was deduced, or some 10-20 per cent of the observed cases per million per year. ...

‘All these points are very much against the basic hypothesis of **Lewis** of a linear relation of dose to leukemic effect irrespective of the dose-rate.’

not possible to claim for **Lewis** s work as others have done, "it is now possible to calculate - within narrow limits - how many deaths will result in any population from an increase in fall-out or other source of radiation" [Leading article in *Science*, vol. 125, p. 963, 1 wishful journalese.

'The burning questions to me are not what are the numbers of leukemia to be expected from atom bombs or radiotherapy, but what from natural background .... Furthermore, to obtain estimates of these, I believe it is wrong to go to [1950s inaccurate, dose rate effects from] atom bombs, where the radiations are qualitatively different [i.e., including effects from neutrons] and, more important, the dose outstandingly different.'

**Samuel Glasstone and Philip J. Dolan, *The Effects of Nuclear Weapons*, 3rd ed., 1977, pp. 611-3:**

'From the earlier studies of radiation-induced mutations, made with fruitflies [by Nobel Laureate Hermann J. Muller and other geneticists on plants, who falsely hyped their insect and plant data as valid for mammals like humans during the June 1957 U.S. Congressional hearings on effects], it appeared that the number (or frequency) of mutations in a given population ... is proportional to the total dose ... More research with mice, however, have shown that these conclusions need to be revised, at least for mammals. [***Mammals are biologically different with respect to DNA repair mechanisms, than short-lived insects whose life cycles are too small to have forced the evolution of advanced DNA repair mechanisms, unlike mammals that need to survive for decades before reproducing.***] When exposed to gamma rays, the mutation frequency in these animals has been found to be dependent on the exposure (or dose) rate ...

'**At an exposure rate of 0.009 roentgen per minute [0.54 R/hour], the total mutation frequency in female mice is indistinguishable from the spontaneous frequency.** [Emphasis added.] **There thus seems to be an exposure-rate threshold below which radiation-induced mutations are absent** ... with adult female mice ... a delay of at least seven weeks between exposure to a substantial dose of radiation from neutrons or gamma rays, and conception causes the mutation frequency in the offspring to drop almost to zero. ... **recovery** in the population would bring about a substantial reduction in the 'load' of mutations in subsequent generations.'

George Bernard Shaw cynically explains groupthink brainwashing bias:

'We cannot help it because we are so constituted that we always believe finally what we wish to believe. The moment we want to believe something, we suddenly see all the arguments for it and become blind to the arguments against it. The moment we want to disbelieve anything, we suddenly discover not only that there is a mass of evidence against, but that this evidence was staring us in the face all the time.'

From the essay titled 'What is Science?' by Professor Richard P. Feynman, presented at the fifteenth annual meeting of the National Teachers Association, 1966 in New York City, and published in *The Physics Teacher*, vol. 7, issue 6, 1968, pp. 313-20:

'... great religions are dissipated by following form without remembering the direct content of the teaching of the great leaders. In this way, it is possible to follow form and call it science, but that is pseudo-science. In this way, we all suffer from the kind of tyranny we have to institutions that have come under the influence of pseudoscientific advisers.

'We have many studies in teaching, for example, in which people make observations, make lists, do statistics, and so on, but these become established science, established knowledge. They are merely an imitative form of science analogous to the South Sea Island radio towers, etc., made out of wood. The islanders expect a great airplane to arrive. They even build wooden airplanes of the same size as the foreigners' airfields around them, but strangely enough, their wood planes do not fly. The result of this pseudoscientific imitation is to produce experts, which many of you are. ... you teachers, who are really teaching children at the bottom of the heap, can maybe do better. As a matter of fact, I can also define science another way: Science is the belief in the ignorance of experts.'

Richard P. Feynman, 'This Unscientific Age', in *The Meaning of It All*, Penguin Books, London, 1998, pages 106-9:

'Now, I say if a man is absolutely honest and wants to protect the populace from the effects of radioactivity, which is what our scientists say they are trying to do, then he should work on the biggest number, not on the smallest number, and he should try to point out the cosmic [radioactivity] which is absorbed by living in the city of Denver is so much more serious [than the smaller doses from nuclear fallout]. All the people of Denver ought to move to lower altitudes.'

Feynman is *not* making a point about low level radiation effects, but about the politics of ignoring the massive natural background radiation and provoking hysteria over much smaller measured fallout pollution radiation doses. Why is the anti-nuclear lobby so concerned about energy - which is not possible even in principle since most of our nuclear radiation is from the sun and from supernova debris coming from the explosion that created the solar system circa 4,540 million years ago - when they could cause much bigger radiation dose to the population by concentrating on the bigger radiation source, natural background radiation. It is possible to shield natural background radiation, e.g. by moving the population of high altitude cities to lower altitudes where there is more air between the people and outer space, use of high-altitude jet aircraft. The anti-nuclear lobby, as Feynman stated back in the 1960s, didn't crusade to reduce the bigger dose of background radiation. Instead they chose to argue against the *much smaller* doses from fallout pollution. Feynman's argument is still interpreted as a political statement, when it is actually exposing pseudo-science and countering political propaganda. It is still ignored as has been pointed out by Senator Hickenlooper on page 1060 of the May-June 1957 U.S. Congressional Hearings before the Special Subcommittee on Radiation of the Joint Committee on Atomic Energy, *The Nature of Radioactive Fallout and Its Effects on Man*:

'I presume all of us would earnestly hope that we never had to test atomic weapons ... but by the same token I presume that we would like to save thousands of lives in this country every year and we could just abolish the manufacture of [road accident causing] automobiles ...'

Dihydrogen monoxide is a potentially very dangerous chemical containing hydrogen and oxygen which has caused numerous severe injuries and deaths by drowning, contributes to the greenhouse effect, accelerates corrosion and rusting of many metals, and contributes to global warming. In natural landscape: 'Dihydrogen monoxide (DHMO) is colorless, odorless, tasteless, and kills uncounted thousands of people every year. While these deaths are caused by accidental inhalation of DHMO, but the dangers of dihydrogen monoxide do not end there. Prolonged exposure to solid form causes severe tissue damage. Symptoms of DHMO ingestion can include excessive sweating and urination, and possibly nausea, vomiting and body electrolyte imbalance. For those who have become dependent, DHMO withdrawal means certain death.'

From the site for the petition against dihydrogen monoxide: '**Please sign this petition and help stop This Invisible Killer. Get**

to do something now. ... Contamination is reaching epidemic proportions: Quantities of dinitrogen monoxide have been found in almost every stream, lake, and reservoir in America today. But the pollution is global, and the contaminant has even been found in Antarctic ice. DHMO has caused millions of dollars of property damage in the Midwest, and recently California.'

A recent example of the pseudoscientific radiation 'education' masquerading as science that Feynman (quoted above) in the 1960s was published in 2009 in an article called 'The proportion of childhood leukaemia incidence in Great Britain that is attributable to natural background ionizing radiation' in *Leukemia*, vol. 23 (2009), pp. 770–776, which falsely asserts - in contradicted evidence that the no-threshold model is *contrary* to Hiroshima and Nagasaki data: 'Risk models based primarily on studies of Japanese atomic bomb survivors imply that low-level exposure to ionizing radiation, including ubiquitous natural background radiation, also raises the risk of childhood leukaemia. Using two sets of recently published leukaemia risk models and estimates of background radiation red-bone-marrow doses received by children, about 20% of the cases of childhood leukaemia in Great Britain are predicted to be attributable to this source.' The authors of this pseudoscience which is the opposite of the facts are R. J. M. van't Hof-Grootenboer (Department of Epidemiology and Public Health, Imperial College, London, UK), G. M. Kendall (Childhood Cancer Research Group, Oxford, UK), M. P. Little (Department of Epidemiology and Public Health, Imperial College, London, UK). It is disgusting and sinful that these leukaemia investigators will either correct their errors or alternatively be banned from using scientific literature to promote false deception until they mend the error of their ways and repent their sins in this matter.

Protein P53, discovered only in 1979, is encoded by gene TP53, which occurs on human chromosome 17. P53 also occurs in other animals including mice, rats and dogs. P53 is one of the proteins which continually repairs breaks in DNA, which easily breaks at body temperature. In each cell of the human body suffers at least two single strand breaks every second, and one double strand (i.e. complete double strand) occurs at least once every 2 hours (5% of radiation-induced DNA breaks are double strand breaks, while 0.007% of spontaneous DNA breaks are double strand breaks)! Cancer occurs when several breaks in DNA happen to occur by chance at nearly the same time, which repair proteins like P53 then repair incorrectly, causing a mutation which can be proliferated. Cancer cannot occur when only one break occurs, because only two loose ends are produced, and P53 will reattach them correctly. But if radiation levels are increased to a certain extent, causing more single strand breaks, P53 works faster and is able to deal with faster breaks, so that multiple broken strand ends do not arise. This prevents DNA strands being repaired incorrectly, and prevents cancer mutation caused by faults in DNA - from arising. Too much radiation of course overloads the P53 repair mechanism, and then it causes as they occur, so multiple breaks begin to appear and loose ends of DNA are wrongly connected by P53, causing an increased cancer rate.

1. DNA-damaging free radicals are equivalent to a source of sparks which is always present naturally.
2. Cancer is equivalent to the fire you get if the sparks are allowed to ignite the gasoline, i.e. if the free radicals are allowed to damage DNA without the damage being repaired.
3. Protein P53 is equivalent to a fire suppression system which is constantly damping out the sparks, or repairing the damaged DNA so that cancer doesn't occur.

In this way of thinking, the 'cause' of cancer will be down to a failure of a DNA repairing enzyme like protein P53 to repair the damage.

**Dr Jane Orient, 'Homeland Security for Physicians', *Journal of American Physicians and Surgeons*, vol. 11, number 3, 1996, pp. 75-9:**

'In the 1960s, a group of activist physicians called Physicians for Social Responsibility (PSR) undertook to "educate the medical profession about the dangers of nuclear weapons," beginning with a series of articles in the *New England Journal of Medicine*. [Note: publishing information for anti-civil defense propaganda back in 1949, e.g. the article in volume 241, pp. 647-53 of *New England Journal of Medicine* which falsely suggests that civil defense in nuclear war would be hopeless because a single burned patient with 40% body area burns required 42 oxygen tanks, 36 pints of plasma, 40 pints of whole blood, 104 pints of fluids, 4,300 red blood cells, 4 nurses and 2 doctors. First, only unclothed persons in direct line of sight without shadowing can get 40% body area burns from radiation, second, duck and cover offers protection in a nuclear attack warning, and G. V. LeRoy had already published earlier, in *J.A.M.A.*, volume 134, 1947, pp. 1143-8, that less than 5% of burns in Hiroshima and Nagasaki were caused by debris fires. In medicine it is always possible to expend vast resources on patients who are fatally injured. In a mass casualty situation, doctors should not give up just because they don't have unlimited resources; as at Hiroshima and Nagasaki, they would do the best with what they have.] On its website, www.psr.org, the group boasts that it "led the campaign to end atmospheric nuclear testing. As a result, the linear no-threshold (LNT) theory of radiation carcinogenesis became entrenched. It enabled activists to calculate enormous potential casualties by taking a tiny risk and multiplying it by the population of the earth. As an enduring consequence, the perceived risks of nuclear war are far out of proportion to actual risks, causing tremendous damage to the American nuclear industry. ... Efforts to save lives were unethical: Any suggestion that nuclear war could be survivable increased its likelihood and was thus tantamount to warmongering. PSR has warned. ...

'For the mindset that engendered and enables this situation, which jeopardizes the existence of the United States as a nation as well as the lives of millions of its citizens, some American physicians and certain prestigious medical organizations bear a heavy responsibility.

'Ethical physicians should stand ready to help patients to the best of their ability, and not advocate sacrificing them in the name of a false security. Even very basic knowledge, especially combined with simple, inexpensive advance preparations, could save countless lives.'

**Dr Theodore B. Taylor, *Proceedings of the Second Interdisciplinary Conference on Selected Effects of a General War*, Special Report 95, July 1969, vol. 2, DASA-2019-2, AD0696959, page 298 (also linked here):**

'I must just say that as far as I'm concerned I have had some doubts about whether we should have had a civil defense program in the United States. I doubt whatsoever now, for this reason, that I've seen ways in which the deterrent forces can fail to hold things off, so that national leaders do, criminal organizations, what have you, groups of people over which we have no control whatsoever other groups of people.'

**this point of view is the key fact on the morality. Suppose we disarm and abandon nuclear power. That won't stop the terrorists, or a foreign reactor blast from coming. Civil defence knowledge is needed. Even when America has ABM, it is vulnerable to wind carried fallout. No quantity of pacifist hot air will protect people against radiation.**

Charles J. Hitch and Roland B. McKean of the RAND Corporation in their 1960 book *The Economics of Defense in the Nuclear Age*, University Press, Massachusetts, pp. 310-57:

'With each side possessing only a small striking force, a small amount of cheating would give one side dominance over the other, and a cheat and prepare a preventative attack would be strong ... With each side possessing, say, several thousand missiles, a vast amount of cheating would be necessary to give one side the ability to wipe out the other's striking capability. ... the more extensive a disarmament agreement, the smaller the force that a violator would have to hide in order to achieve complete domination. Most obviously, "the abolition of the violation" in a general or "unlimited" war" would offer the most insuperable obstacles to an inspection plan, since the violator could gain an obvious advantage from the concealment of even a few weapons.'

Disarmament after World War I caused the following problem which led to World War II (reported by Winston S. Churchill in the *Express* newspaper of November 1, 1934):

'Germany is arming secretly, illegally and rapidly. A reign of terror exists in Germany to keep secret the feverish and terrible preparation making.'

British Prime Minister Thatcher's address to the United Nations General Assembly on disarmament on 23 June 1982, where she pointed out that in the years since the nuclear attacks on Hiroshima and Nagasaki, 10 million people had been killed by 140 non-nuclear conflicts:

'The fundamental risk to peace is not the existence of weapons of particular types. It is the disposition on the part of some states to threaten others by resorting to force against other nations ... Aggressors do not start wars because an adversary has built up his own strength because they believe they can gain more by going to war than by remaining at peace.'

J. D. Culshaw, the then Director of the U.K. Home Office Scientific Advisory Branch, stated in his article in the *Scientific Advisory Committee Reports*, September 1972 (issue No. 19), classified 'Restricted':

'Apart from those who don't want to know or can't be bothered, there seem to be three major schools of thought about the nature of World War ...

\* 'The first group think of something like World War II but a little worse ...

\* '... the second of World War II but very much worse ...

\* 'and the third group think in terms of a catastrophe ...

'When the Armageddon concept is in favour, the suggestion that such problems exist leads to "way out" research on these phenomena sufficient to mention a new catastrophic threat [e.g., 10 years later this was done by Sagan with "nuclear winter" hype, which turned out to be because modern concrete cities can't produce firestorms like 1940s wooden-built areas of Hamburg, Dresden and Hiroshima] to set out the possibilities of it arising. The underlying appeal of this concept is that if one could show that the execution of all out nuclear, chemical warfare would precipitate the end of the world, no one but a mad man would be prepared to initiate such a war. [However, history proves, plenty of mad men end up gaining power and leading countries into wars.]'

J. K. S. Clayton, then Director of the U.K. Home Office Scientific Advisory Branch, stated in his introduction, entitled *The Challenge of Defence*, to the 1977 Home Office Scientific Advisory Branch *Training Manual for Scientific Advisers*:

'Since 1945 we have had nine wars - in Korea, Malaysia and Vietnam, between China and India, China and Russia, India and Pakistan, the Arabs and Israelis on three occasions. We have had confrontations between East and West over Berlin, Formosa and Cuba. There have been civil wars or rebellions in no less than eleven countries and invasions or threatened invasions of another five. Whilst it is not suggested that these incidents could have resulted in major wars, they do indicate the aptitude of mankind to resort to a forceful solution of its problems. Success. ...'

It is estimated that Mongol invaders exterminated 35 million Chinese between 1311-40, without modern weapons. Communist China killed 40 million dissenters between 1949 and May 1965, according to detailed data compiled by the Russians on 7 April 1969. The Soviet dictatorship killed 40 million dissenters, mainly owners of small farms, between 1917-59. Conventional (non-nuclear) air raids on Japan killed 600,000 during World War II. The single incendiary air raid on Tokyo on 10 March 1945 killed 140,000 people (more than the total killed by the atomic bombs on Hiroshima and Nagasaki combined) at much less than the \$2 billion expense of the Hiroshima and Nagasaki nuclear bombing. Conventional air raids on Germany during World War II killed 593,000 civilians.

**House of Lords debate *Nuclear Weapons: Destructive Power*, published in Hansard, 14 June 1988:**

**Lord Hailsham of Saint Marylebone: 'My Lords, if we are going into the question of lethality of weapons and seek the nuclear as distinct from the so-called conventional range, is there not a danger that the public may think that Vimy, Verdun and Dresden were all right—sort of tea parties—and that nuclear war is something which in itself is unacceptable?'**

**Lord Trefgarne: 'My Lords, the policy of making Europe, or the rest of the world, safe for conventional war is not one of the policies of the Government.'**

**House of Commons debate *Civil Defence* published in Hansard, 26 October 1983:**

**Mr. Bill Walker (Tayside, North): 'I remind the House that more people died at Stalingrad than at Hiroshima or Nagasaki. We talk about fighting a conventional war in Europe as if it were acceptable. One rarely sees demonstrations by the so-called peace movement against a conventional war in Europe, but it could be nothing but ghastly and horrendous. The casualties would exceed those at Stalingrad, and that cannot be acceptable to anyone who wants peace'**



On 29 October 1982, Thatcher stated of the Berlin wall: 'In every decade since the war the Soviet leaders have been reminded that ideology only survives because it is maintained by force. But the day comes when the anger and frustration of the people is so great that it contains it. Then the edifice cracks: the mortar crumbles ... one day, liberty will dawn on the other side of the wall.'

On 22 November 1990, she said: 'Today, we have a Europe ... where the threat to our security from the overwhelming conventional Warsaw Pact has been removed; where the Berlin Wall has been torn down and the Cold War is at an end. These immense changes about by chance. They have been achieved by strength and resolution in defence, and by a refusal ever to be intimidated.'

**'The case for civil defence stands regardless of whether a nuclear deterrent is necessary or not. ... Even if the U.K. were at war, we would be as powerless to prevent fallout from a nuclear explosion crossing the sea as was King Canute to stop the tide.'** Home Office leaflet, Civil Defence, 1982.

'... peace cannot be guaranteed absolutely. Nobody can be certain, no matter what policies this or any other Government were to take. The United Kingdom would never again be attacked. Also we cannot tell what form such an attack might take. Current strategic thinking that if war were to break out it would start with a period of conventional hostilities of uncertain duration which might or might not escalate ... while nuclear weapons exist there must always be a chance, however small, that they will be used against us [like gas bombs in WWI] as a consequence of war between other nations in which we were not involved fall out from nuclear explosions could fall on a neutral country. A conventional war is not the soft option that is sometimes suggested. It is also too easily forgotten that in World War II some 50 million people died and that conventional weapons have gone on killing people ever since 1945 without respite.' - **The Minister of State, Scottish Office, Mr. James Douglas, House of Lords debate on Civil Defence (General Local Authority Functions) Regulations, Hansard, 1 November 1983.**

'All of us are living in the light and warmth of a huge hydrogen bomb, 860,000 miles across and 93 million miles away, which is in a continuous explosion.' - Dr Isaac Asimov.

'Dr Edward Teller remarked recently that the origin of the earth was somewhat like the explosion of the atomic bomb...' - Dr Harold L. Brode, *Planets: Their Origin and Development*, Yale University Press, New Haven, 1952, p. ix.

'But compared with a supernova a hydrogen bomb is the merest trifle. For a supernova is equal in violence to about a million million hydrogen bombs all going off at the same time.' - Sir Fred Hoyle (1915-2001), *The Nature of the Universe*, Pelican Books, London, 1962, p. 10.

'In fact, physicists find plenty of interesting and novel physics in the environment of a nuclear explosion. Some of the physical phenomena are objects of research, and promise to provide further understanding of nature.' - Dr Harold L. Brode, The RAND Corporation, 'Reactions to Nuclear Weapons Effects,' *Annual Review of Nuclear Science*, Volume 18, 1968, pp. 153-202.

'It seems that similarities do exist between the processes of formation of single particles from nuclear explosions and formation of the debris of a  $4 \times 10^{28}$  megatons of TNT equivalent, type Ia) supernova explosion. We may be able to learn much more about the earth, by further investigating the process of radioactive fallout from the nuclear weapons tests.' - **Dr Paul K. Kuroda (1917-2000)** Arkansas, 'Radioactive Fallout in Astronomical Settings: Plutonium-244 in the Early Environment of the Solar System,' pages 83-95 in *Radionuclides in the Environment: A Symposium Sponsored By the Division of Nuclear Chemistry and Technology At the Meeting of the American Chemical Society, San Francisco, California, April 1-3, 1968*, edited by Symposium Chairman Dr. J. Freiling (1922-2000) of the U.S. Naval Radiological Defense Laboratory, Advances in Chemistry Series No. 93, American Chemical Society, Washington, D.C., 1970.

**Dr Paul K. Kuroda (1917-2001)** in 1956 correctly predicted the existence of water-moderated natural nuclear reactors in flood basalts, which were discovered in 1972 by French physicist Francis Perrin in three ore deposits at Oklo in Gabon, where sixteen self-sustaining natural nuclear reactors with self-sustaining nuclear fission 2,000 million years ago, each lasting several hundred thousand years, existed. The radioactive waste they generated remained in situ for a period of 2,000,000,000 years without escaping. They were discovered through investigations into why the U-235 content of the uranium in the ore was only 0.7171% instead of the normal 0.7202%. Some of the ore of the natural reactors, had a U-235 isotopic abundance of just 0.440%. Kuroda's brilliant paper is entitled, 'On the Nuclear Physics of Uranium Minerals', published in the *Journal of Chemical Physics*, vol. 25 (1956), pp. 781-782 and 1295-1296.

A type Ia supernova explosion, always yielding  $4 \times 10^{28}$  megatons of TNT equivalent, results from the critical mass effect of the carbon dwarf as soon as its mass exceeds 1.4 solar masses due to matter falling in from a companion star. The degenerate electron gas in the dwarf is then no longer able to support the pressure from the weight of gas, which collapses, thereby releasing enough gravitational potential energy to cause the fusion of carbon and oxygen into heavy elements, creating massive amounts of radioactive nuclides, particularly the radioactive nickel-56, but half of all other nuclides (including uranium and heavier) are also produced by the **'R' (rapid) process of neutron captures by fusion products in supernovae explosions**. Type Ia supernovae occur typically every 400 years in the Milky Way. On 4 July 1054, Chinese astronomers observed in the sky (without optical instruments) the bright supernova in the constellation Taurus, still visible as the Crab Nebula through telescopes. The Crab Nebula debris has a diameter now of 7 light years and is still expanding at 1,000 miles/second. The supernova debris shock wave triggers star formation when it encounters hydrogen gas in space by compressing it with debris; bright stars are observed in the Orion Halo, the 300 light year diameter remains of a supernova. It is estimated that when it was forming 4,540 million years ago, a supernova occurred around 100 light years away, and the heavy radioactive debris shock wave was moving at 1,000 miles/second. Most of the heavy elements including iron, silicon and calcium in the Earth and people are the stable end products of radioactive decay chains from the space burst fallout of a  $7 \times 10^{26}$  megatons thermonuclear explosion, created by fusion and successive neutron captures after the implosion of a white dwarf; a supernova explosion.

How would a  $10^{55}$  megaton hydrogen bomb explosion differ from the **big bang**? Ignorant answers biased in favour of curved spacetime (quantum gravity!) abound, such as claims that explosions can't take place in 'outer space' (disagreeing with the facts from nuclear tests in Russia and America in 1962, not to mention natural supernova explosions in space!) and that explosions produce sound waves in a vacuum. There are indeed major differences in the nuclear reactions between the big bang and a nuclear bomb. But it is helpful to notice the similarities. That implosion systems suggest the mechanism of gravitation: in implosion, TNT is well-known to produce an *inward* force on a bomb. Newton's 3rd law says there is an equal and opposite reaction force *outward*. In fact, you can't have a radially outward force with

reaction force! It's the rocket principle. The rocket accelerates (with force  $F = ma$ ) *forward* by virtue of the recoil from acceleration (with force  $F = -ma$ ) in the *opposite* direction! Nothing massive accelerates without an equal and opposite reaction force. Applying measured  $6 \times 10^{-10} \text{ ms}^{-2} \sim H_0$  cosmological acceleration of matter radially outward from observers in the universe which was accurately in 1996 and later observationally discovered in 1999 (by Perlmutter, et al.), we find an outward force  $F = ma$  and invoke the 3rd law. The inward force allows quantitative predictions, and is mediated by gravitons, predicting gravitation in: (unlike string theory, which is just a landscape of  $10^{500}$  different perturbative theories and so can't make any falsifiable predictions about gravity). So it seems as if nuclear explosions do indeed provide helpful analogies to natural features of the world, and the  $\Lambda$ CDM model of cosmology - with its force-fitted unobserved *ad hoc* speculative 'dark energy' - ignores and sweeps under the rug gravity effects which increase the physical understanding of particle physics, particularly force unification and the relation of gravitation to electroweak  $SU(2) \times U(1)$  section of the Standard Model of fundamental forces.

**Richard Lieu, Physics Department, University of Alabama, 'Lambda-CDM cosmology: how much suppression of credibility does the model really lead its competitors, using all evidence?', <http://arxiv.org/abs/0705.2462>.**

Even Einstein grasped the possibility that general relativity's lambda-CDM model is at best just a classical approximation to quantum gravity at the end of his life when he wrote to Besso in 1954:

'I consider it quite possible that physics cannot be based on the [classical differential equation] field principle, i.e., on continuous spacetime. In this case, nothing remains of my entire castle in the air, [non-quantum] gravitation theory included ...'

'Science is the organized skepticism in the reliability of expert opinion.' - Professor Richard P. Feynman (quoted by Professor Lee Smolin, *The Trouble with Physics*, Houghton-Mifflin, New York, 2006, p. 307).

'The expression of dissenting views may not seem like much of a threat to a powerful organization, yet sometimes it triggers an angry response. The reason is that a single dissenter can puncture an illusion of unanimity. ... Among those suppressed have been the engineers who point out problems with the Challenger space shuttle that caused it to blow up. More fundamentally, suppression is a denial of the right to debate that are the foundation of a free society. Even worse than the silencing of dissidents is the chilling effect such practices have on every individual who speaks out, numerous others decide to play it safe and keep quiet. More serious than external censorship is the self-censorship.'

— Professor Brian Martin, University of Wollongong, 'Stamping Out Dissent', Newsweek, 26 April 1993, pp. 49-50

In 1896, Sir James Mackenzie-Davidson asked Wilhelm Röntgen, who discovered X-rays in 1895: 'What did you think?' Röntgen replied: 'I investigated.' The reason? Cathode ray expert J. J. Thomson in 1894 saw glass fluorescence far from a tube, but due to poor opinion) he avoided investigating that X-ray evidence! 'Science is the organized skepticism in the reliability of expert opinion.' - Richard P. Feynman, *The Trouble with Physics*, Houghton-Mifflin, 2006, p. 307.

Mathematical symbols in this blog: your computer's browser needs access to standard character symbol sets to display Greek symbols in mathematical physics. If you don't have the symbol character sets installed, the density symbol ' $\rho$ ' (*Rho*) will appear as 'r' and the ' $\mu$ ' as 'p', causing confusion with the use of 'r' for radius and 'p' for momentum in formulae. This problem exists with Mozilla Firefox 3, Microsoft Explorer which displays Greek symbols.

## About Me



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<http://nige.wordpress.com/> <http://glasstone.blogspot.co.uk/2015/07/capabilities-of-nuclear-weapons.html/>  
<http://www.math.columbia.edu/~woit/wordpress/?p=273#comment-5322>. <http://www.math.columbia.edu/~woit/wordpress/?p=353&cpag=1#comment-8728>. <http://www.math.columbia.edu/~woit/wordpress/?p=215#comment-4082>.

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**From 1945-62, America tested 216 nuclear weapons in the atmosphere, totalling 154 megatons, with a mean yield of 71 kt**

**From 1949-62, Russia tested 214 nuclear weapons in the atmosphere, totalling 281 megatons, with a mean yield of 1.31 Mt**

**From 1952-8, Britain tested 21 nuclear weapons in the atmosphere, totalling 10.8 megatons, with a mean yield of 514 kt**

**From 1960-74, France tested 46 nuclear weapons in the atmosphere, totalling 11.4 megatons, with a mean yield of 248 kt**

**From 1964-80, China tested 23 nuclear weapons in the atmosphere, totalling 21.5 megatons, with a mean yield of 935 kt**

**In summary, from 1945-80, America, Russia, Britain, France and China tested 520 nuclear weapons in the atmosphere totalling 298.7 megatons, with a mean yield of 921 kilotons**

Mean yield of the 5,192 nuclear warheads and bombs in the deployed Russian nuclear stockpile as of January 2009: 0.317 Mt. Total

Mean yield of the 4,552 nuclear warheads and bombs in the deployed U.S. nuclear stockpile as of January 2007: 0.257 Mt. Total

For diffraction damage where damage areas scale as the two-thirds power of explosive yield, this stockpile's area damage potential is equivalent to the 20,000,000 conventional bombs of 100 kg size (2 megatons of TNT equivalent total energy) dropped on Germany during World War II (Total nuclear bomb blast diffraction damaged ground area)/(Total conventional blast diffraction damaged ground area to German War II) =  $[4,552 \times (0.257 \text{ Mt})^{2/3}] / [20,000,000 \times (0.000001 \text{ Mt})^{2/3}] = 1,840/431 = 4.3$ . Thus, although the entire U.S. stockpile is only capable of causing much less diffraction type damage area, because *any given amount of explosive energy is far more efficient when distributed over many small explosions than in a single large explosion! Large explosions are inefficient because they cause unintended collateral damage*

In a controlled sample of 36,500 survivors, 89 people got leukemia over a 40 year period, above the number in the unexposed control group (see *Radiation Research*, volume 146, 1996, pages 1-27.) Over 40 years, in 36,500 survivors monitored, there were 176 leukemia deaths more than the control (unexposed) group got naturally. There were 4,687 other cancer deaths, but that was merely 339 above the control (unexposed) group, so this is statistically a much smaller rise than the leukemia result. Natural leukemia rates, which are very low, were increased by 51% in the irradiated survivors, but other cancers were merely increased by just 7%. Adding all the cancers together, 4,863 cancers (virtually all natural cancer, nothing whatsoever to do with radiation), which is just 428 more than the unexposed control group. The total increase over the natural cancer rate due to bomb exposure was only 9%, spread over a period of 40 years. There was no increase in genetic malformations.

There should be a note here about how unnatural radioactive pollution is (not) in space: the earth's atmosphere is a radiation shield equivalent to being protected behind a layer of water 10 metres thick. This reduces the cosmic background radiation by a factor of 10 of what it would be without the earth's atmosphere. Away from the largely uninhabited poles, the Earth's magnetic field deflects charged cosmic radiations, which are deflected and end up spiralling around the magnetic field at high altitude, trapped radiation belts. On the Moon, for example, there is no atmosphere or significant magnetic field so the natural radiation exposure rate at solar minimum is 1 milliRoentgen per hour (about 10 microSieverts/hour) some 100 times that of the Earth (0.010 milliRoentgen per hour or about 0.10 microSieverts/hour). The Apollo astronauts visiting the Moon were dosed with an average of 275 milliRoentgens (about 2.75 milliSieverts) of radiation (well over a year's exposure to natural background level) in over just 19.5 days. It is a lot more than that during a solar flare, which is one of the concerns for astronauts (micrometeorites are another concern in a soft spacesuit).

The higher up you are above sea level, the less of the atmosphere there is between you and space, so the less shielding you have to protect you from the intense cosmic space radiations (emitted by thermonuclear reactors we call 'stars', as well as distant supernovae and explosions). At sea level, the air above you constitutes a radiation shield of 10 tons per square metre or the equivalent of 10 metres thick water shield between you and outer space. As you go up a mountain or up in an aircraft, the amount of air between you and space decreases, thus radiation levels increase with altitude because there is less shielding. The normal radiation exposure rate shoots up by a factor of 20, from 0.010 to 0.20 milliRoentgens per hour, when an airplane ascends to 36,000 feet cruising altitude. (The now obsolete British Concorde supersonic transport used to maintain radiation shielding equipment so that it could drop to lower-altitude flight routes if excessive cosmic radiation due to solar storms were detected, so that aircrew get more radiation exposure than many nuclear industry workers at nuclear power plants. Residents of the high-altitude Denver get 100 milliRoentgens (about 1 milliSievert) more annual exposure than a resident of Washington, D.C., but the anti-radiation cranks don't campaign for the city to be shut to save kids radiation exposure, for mountain climbing to be banned, or for the city to be moved to sea level.)

1994 revised Introduction to Kearny's Nuclear War Survival Skills, by Dr Edward Teller, January 14, 1994:

'If defense is neglected these weapons of attack become effective. They become available and desirable in the eyes of an imperialist whose means are limited. Weapons of mass destruction could become equalizers between nations big and small, highly developed and less so. If defense is developed and if it is made available for general prevention of war, weapons of aggression will become less effective. Defense makes war itself less probable. ... One psychological defense mechanism against danger is to forget about it. This attitude is disastrous. It may turn a limited danger into a fatal difficulty.'

Advice of Robert Watson-Watt (Chief Scientist on the World War II British Radar Project, defending Britain against enemy attack): 'The third best to go on with, the second best comes too late, the best never comes.'

From Wikipedia (a source of groupthink): 'Groupthink is a type of thought exhibited by group members who try to maintain group cohesion without critically testing, analyzing, and evaluating ideas. Individual creativity, uniqueness, and independence are lost in the pursuit of group cohesiveness, as are the advantages of reasonable balance in choice and thought that might be obtained by making decisions as a group. During groupthink, members of the group avoid promoting viewpoints outside the zone of consensus thinking. A variety of motives for this may exist such as a desire to avoid being seen as foolish, or a desire to avoid embarrassing or angering other members of the group. Groupthink may cause groups to make hasty, irrational decisions. Individual doubts are set aside, for fear of upsetting the group's balance.'

## Links

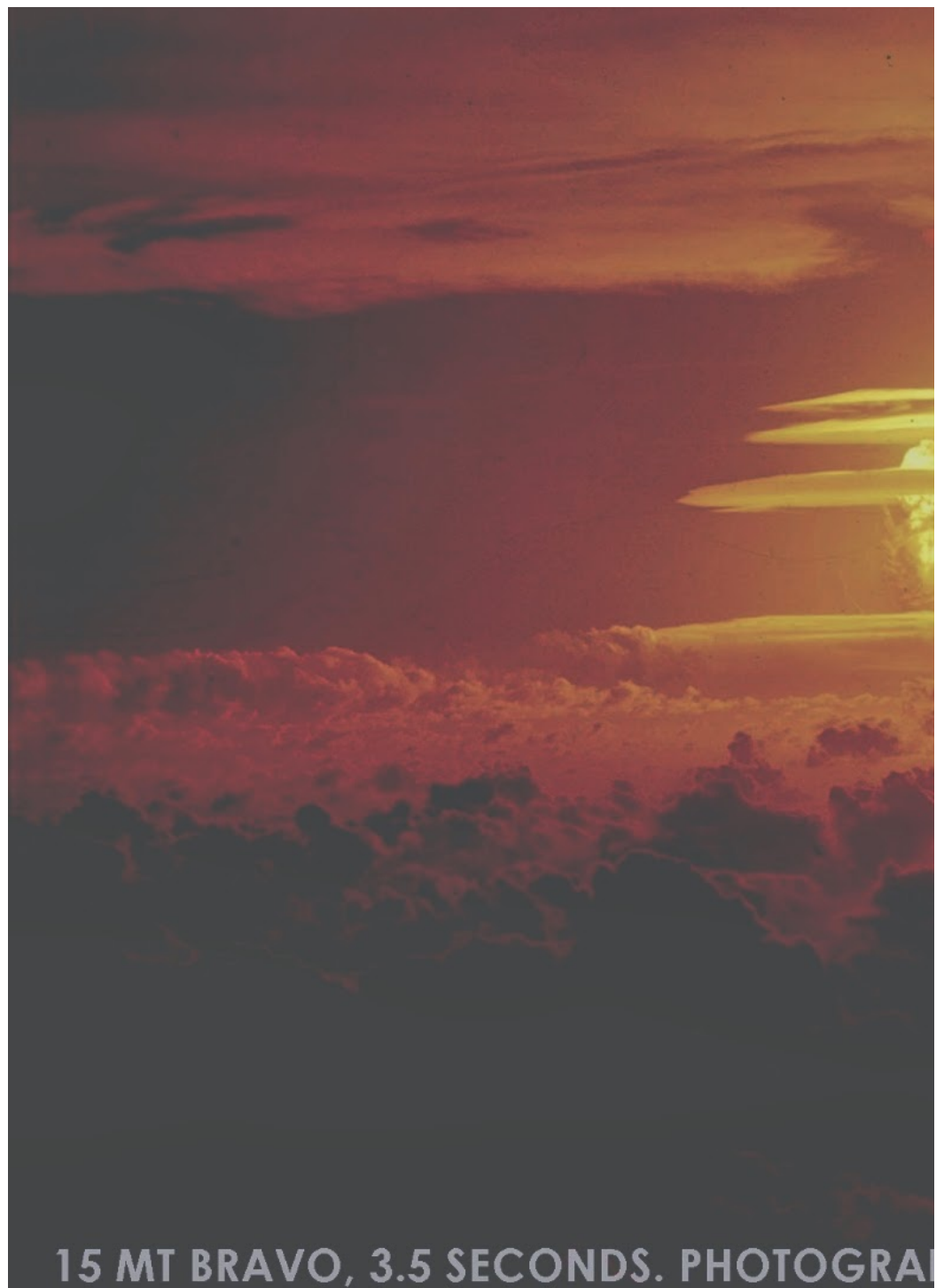
- ◆ Google News
- ◆ Dr Carl E. Baum's EMP theory and interaction notes
- ◆ The Atomic Heritage Foundation
- ◆ Radiation Effects Research Foundation lumps data together to cover up benefits of low dose radiation in Hiroshima Life Span Study!
- ◆ DTRA (Defense Threat Reduction Agency) Nuclear testing histories (PDF files)
- ◆ Samuel Glasstone and Philip J. Dolan
- ◆ Carl F. Miller's fallout research at nuclear tests
- ◆ British Home Office Scientific Advisory Branch
- ◆ Samuel Cohen's book about the collateral damage averting, invasion-detering neutron bomb he invented, and the attacks he endured as a result
- ◆ Jerry Emanuelson's review of EMP facts, including the direct dependence of the EMP on the Earth's natural magnetic field strength at the burst location
- ◆ Essays by 1950s American nuclear weapon effects test (and neutron bomb design) experts, discrediting anti-civilian nuclear propaganda
- ◆ Neutron bomb inventor Samuel Cohen's 2006 book on the history of the neutron bomb, the most moral weapon ever invented

to its purely military deterrent capabilities, and the pseudo-scientific propaganda war he has had to endure from the deterrence

- ◆ Karl-Ludvig Grønhaug's EMP reports page with useful PDF downloads on prompt EMP and MHD-EMP measure nuclear tests (Norwegian language)
- ◆ Colonel Derek L. Duke's factual book on nuclear weapons accidents, *Chasing Loose Nukes, as told to Fred Dung*
- ◆ The H-Bomb and the birth of the Universe: 'For 100 Million years after time began, the universe was dark as pitch hydrogen condensed into huge nuclear fireballs. That moment-when the universe first lit up-was the moment of creation'
- ◆ American *EMP Interaction* manual: comprehensive theory of both the EMP source mechanism and the EMP pick antenna by electromagnetic inductance (30 MB PDF file)
- ◆ British Mission to Japan, *The Effects of the Atomic Bombs at Hiroshima and Nagasaki*, H. M. Stationery Office, (high quality 42.5 MB pdf file).
- ◆ 1950 edition (high quality 82.7 MB PDF file) of U.S. Department of Defense book *The Effects of Atomic Weapons*
- ◆ 1957 edition (high quality 90.8 MB PDF file) of subsequently deleted sections on nuclear tests of civil defense countermeasures from U.S. Department of Defense book *The Effects of Nuclear Weapons*
- ◆ 1957 edition (low quality 30.6 MB PDF file) of entire U.S. Department of Defense book *The Effects of Nuclear Weapons*
- ◆ 1962/64 edition (high quality 188 MB PDF file) of major revised sections in the U.S. Department of Defense book *Nuclear Weapons*
- ◆ 1962/64 edition (high quality 43.8 MB PDF file) of 74 pages of subsequently deleted material dealing with thermal effects on houses at nuclear tests and civil defense countermeasures chapter, from the U.S. Department of Defense book *The Effects of Nuclear Weapons*
- ◆ 1977 edition (single 36.8 MB PDF file) of U.S. Department of Defense book *The Effects of Nuclear Weapons*
- ◆ Bill Forstchen, "One Second After" book about EMP attack risk and its effects on USA.
- ◆ U.S. Department of Energy Opennet Documents Online (includes many Nevada and Pacific nuclear test reports and documents)
- ◆ Defense Technical Information Center (DTIC)'s Scientific and Technical Information Network (STINET) Service declassified Nevada and Pacific test reports)
- ◆ Highlights from ABM testing history
- ◆ THAAD Goes Another ABM Test
- ◆ Alex Wellerstein's Restricted Data blog contains some interesting news (but beware of his uncritical use of unobserved and nude skin thermal radiation and other effects predictions from the 1977 edition of Glasstone and Dolan; he deletes objective comments and pretends that honest criticisms of propaganda as being ignorant deception are rude as an exercise in the facts and refusing to engage in objective discussion of controversial aspects of this topic; basically if you pay homage to groupthink bias you may be tolerated).
- ◆ Carey Sublette's Nuclear Weapon Archive (it contains errors from Chuck Hansen's compilation, and it is concentrated on nuclear weapons, not on civil defence countermeasure evaluations done at nuclear tests; note that Chuck Hansen's books and quotation from Neil O' Hines's book *Proving Ground* on the effects of the 1952 Mike explosion on nearby Engebi Island. Hines later in the book states that the native rats in fact survived the intense close-in blast, heat and fallout under a layer of soil, despite the initial ignorant belief that they could not have survived!!!)

- Quantum Field Theory
- Los Alamos Science journal
- Excellent particle physics gauge theory (fundamental force interaction) issue of Los Alamos Science journal
- 





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BANK OF JAPAN BUILDING AFTER ATTACK ON HIROSHIMA  
survivors extinguished fire with water buckets.

U. S. STRATEGIC BOMBING SURVEY

Field Team No. 1, Hiroshima, Japan SHEET No. 2  
Building No.: 24. Coordinates: 5H. Distance from  
(GZ): 1,300, (AZ): 2,400.

NAME: Bank of Japan, Hiroshima branch.

CONSTRUCTION AND DESIGN

Type: Reinforced-concrete frame (steel core).

REMARKS: Fire only in room at southwest corner of second story and in entire third story. No fire in building right after bomb, but afire at 1000 hours. Fire in room in second story extinguished with water buckets.

[www.arch-hiroshima.net/arch-hiroshima/arch/delta\\_center/hichigin\\_s.html](http://www.arch-hiroshima.net/arch-hiroshima/arch/delta_center/hichigin_s.html)

The Former Bank of Japan, Hiroshima Branch was representative of Hiroshima's historical buildings in the early Showa period, with an outstanding classical-style appearance. Despite being exposed to the A-bombing a mere 350 meters from the hypocenter of the A-bomb, thanks to its sturdy structure, the bank still remains as it appeared when first built.

Since the armored shutters on the first and second floors were closed at the time of the A-bombing, the interior was not badly damaged. However, the third floor, where the shutters were open, was completely burned. Only two days later, on August 8, 1945, the Bank of Japan reopened for withdrawals and provided space for temporary branches of other financial institutions in Hiroshima City, which had been rendered unable to conduct business. This is an invaluable A-bombed building that conveys its history of support for the reconstruction of Hiroshima from a financial aspect.

It was used as a bank until 1992. Hiroshima City now rents it. It is mainly used as a gallery and visitors are welcome inside during exhibitions.

This was built as a branch of Hippon Ginko, Japan's central bank, in 1936 designed by NAGANO Uheiji. The exterior is in the Renaissance style with Ionic columns. The entrance, which used to have an office area and bank counters, has an expanding space of a vaulted ceiling. The interior ornaments were lost at the time of the A-bombing.

[http://www.hiroshima-navi.or.jp/en/sightseeing/hibaku\\_jireihitatemono/21383.php](http://www.hiroshima-navi.or.jp/en/sightseeing/hibaku_jireihitatemono/21383.php)

The Bank of Japan, Hiroshima, survived 380 m from Ground Zero, within the firestorm area, when fires were extinguished by its survivors, the majority of people in the building having survived. Secret US Strategic Bombing Survey defense for modern concrete buildings is effective. The building was reopened as a bank on 8 August, merely two days after the attack, and continued in use as a bank until 1992. It remains in Hiroshima. This beautifully designed and sturdy reinforced building was designed in 1936 by Nagano Uheiji.